



DEPARTMENT OF MAIN ROADS, NEW SOUTH WALES

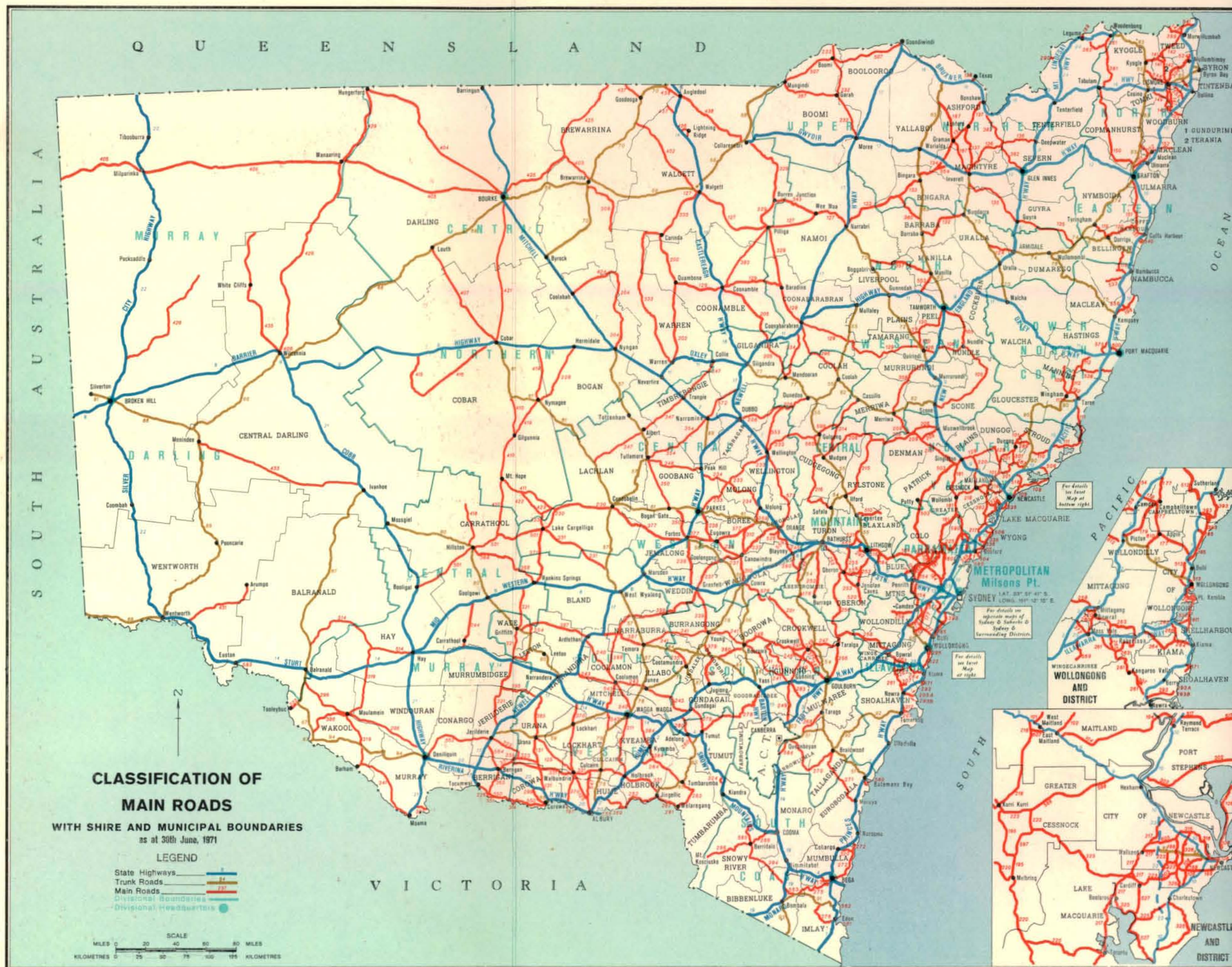
ANNUAL REPORT 70-71

INSIDE FRONT COVER: Map of
New South Wales showing
Classification of Main Roads



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Cover photograph:
A pedestrian overbridge
constructed over a new deviation
of the Pacific Highway adjacent to
the primary school at Korora,
north of Coffs Harbour.

Commissioner for Main Roads:
R. J. S. THOMAS
Assistant Commissioner for Main
Roads:
A. F. SCHMIDT

DEPARTMENT OF MAIN ROADS
PRINCIPAL OFFICERS
HEAD OFFICE

Engineer-in-Chief:
G. V. FAWKNER
Deputy Engineer-in-Chief:
R. E. JOHNSTON
Chief Engineer (Bridges):
F. C. COOK
Chief Engineer (Rural):
N. F. HATCHER
Chief Engineer (Roadworks):
W. J. C. ORR
Chief Engineer (Urban):
E. F. MULLIN
Secretary:
C. W. MANSFIELD
Chief Accountant:
R. G. BARTON
Principal Legal Officer:
G. C. SHELTON

**DEPARTMENT OF MAIN ROADS
NEW SOUTH WALES
SYDNEY, NOVEMBER, 1971**

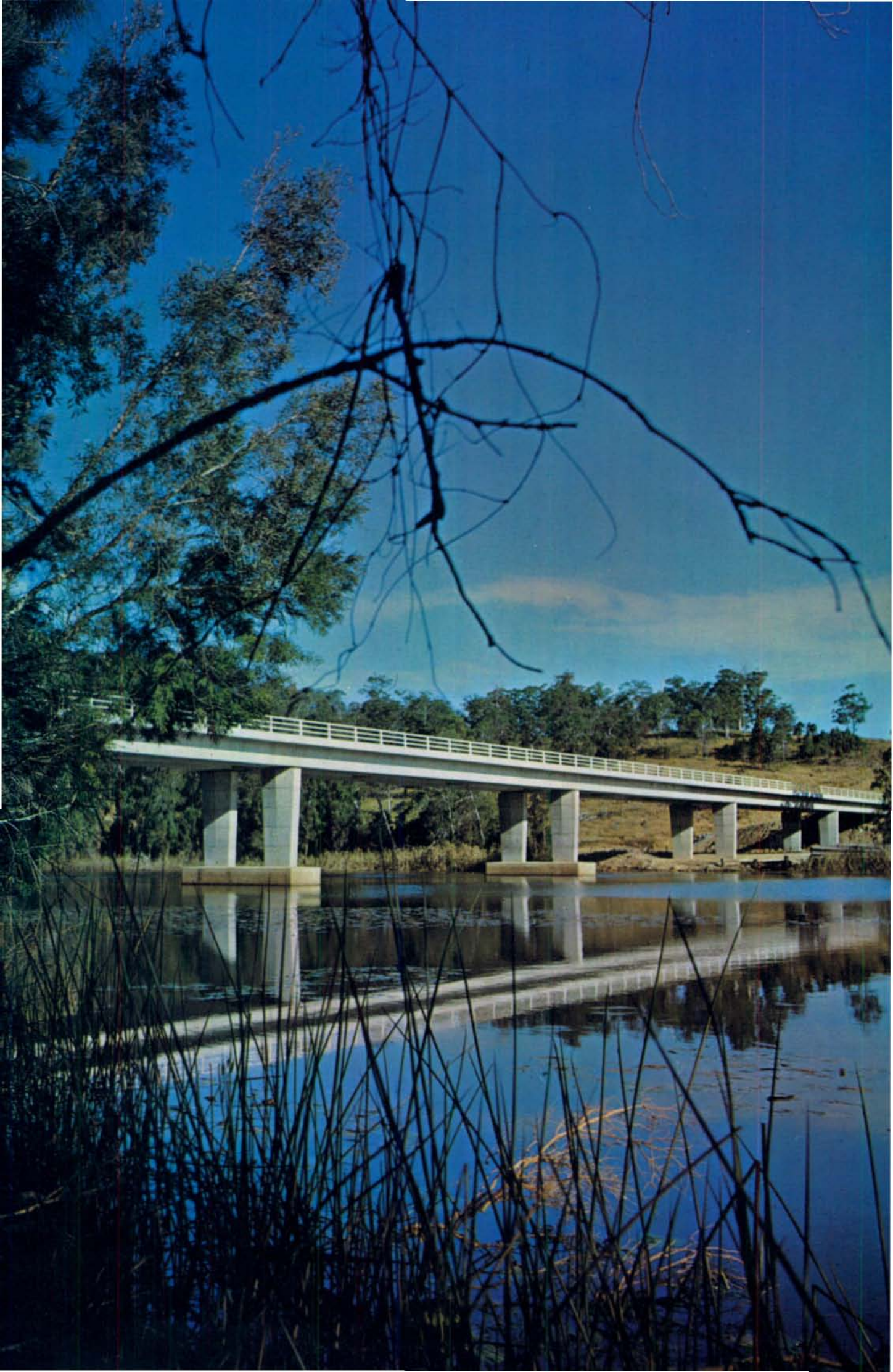
**THE HONOURABLE
THE MINISTER FOR HIGHWAYS
SYDNEY**

*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 Forty-sixth Annual
Report, including statement of
accounts.*

*The report covers the period from 1st
July, 1970 to 30th June, 1971, though a
few matters referred to are carried
beyond the latter date for convenience
and completeness of record.*

**R. J. S. THOMAS
COMMISSIONER FOR MAIN ROADS**



GENERAL REVIEW

During the financial year recently past the Department again made significant advances towards its ultimate aim of providing a modern well-planned Main Roads System to suit urban and rural requirements.

In order to maintain a planned rate of progress it is essential that a continuing increase in the funds for the Department's work should be available.

For the year under review many important road and bridge projects were completed, while work was continued on others and some new major works were commenced.

Considerable progress is being made in the provision of expressways, particularly in the outer urban areas.

During the year work continued on the section of the Western Expressway between Russell Street, Emu Plains and Bringelly Road, Penrith, including the new bridge over the Nepean River at Regentville; bridgeworks on the section of the Western Expressway between Homebush and Granville were commenced at three of the eleven sites where bridges are required; work continued on the nine-mile section of the South Western Expressway from the Cross Roads near Liverpool to the Campbelltown-Camden Road; the extension of the Southern Expressway south of Wollongong was continued and progress on the fourteen-mile section between Waterfall and Bulli Pass, proposed as a Tollwork was maintained.

In addition, progress was maintained on the construction of the new bridge over the Hawkesbury River at Mooney Mooney. When completed it will link the two sections of the Sydney-Newcastle Expressway already in use, providing a continuous Tollway, sixteen miles in length between Berowra and Calga.

Within the City of Sydney, considerable progress was made in the construction of the Western Distributor.

At the latter end of the year it was announced that the construction of another major section of the North Western Expressway, from Druitt Street to Glebe would commence later in 1971.

In the planned programme of improvements on the Main Roads System recognition is given to the co-operation displayed by local government councils in undertaking the necessary works on the Trunk and ordinary Main Roads in the Country and on the Main Roads generally in the County of Cumberland. With this co-operation and assistance the Department has been able to provide the service necessary to meet the needs of the motoring public.



Floodwaters over the Mitchell Highway near Bourke.



Improvements to Epping Road including a wide grassed median between dual three lane carriageways, storage bays for right turning traffic and separated left turn lanes.

GENERAL REVIEW — CONTINUED

Throughout the year, investigations for road proposals were speeded up by the extensive use of the Department's helicopter. Since the purchase of a helicopter in 1964, this versatile machine has proved invaluable in connection with many aspects of the Department's work, particularly in road location surveys and its use has resulted in considerable savings in time and manpower.

During the year it has been engaged on many road investigation proposals as well as traffic observation by Departmental officers and for photographic purposes.

It has also been of special assistance to the New South Wales Police Department to whom it has been made available as requested for traffic control purposes.

In the improvement of the existing roads system and the provision of additions to it, by virtue of new roads or expressways, it is first necessary to acquire the land needed to accommodate the improved or new facility.

The cost of acquisition of additional land especially for expressways and other major widening improvements in urban areas represents a considerable proportion of the Department's expenditure and is in the order of forty per cent of the total cost of urban expressway works.

During the past year a total amount of \$13.7 million was spent on property purchases in the County of Cumberland.

The disastrous and widespread floods which occurred in the latter part of 1970 and again between January and April, 1971, resulted in considerable damage to road pavements and bridges on Main Roads.

The worst affected areas were in the North Western and South Coast areas of the State although heavy and extensive rain did adversely affect roads in most other areas.

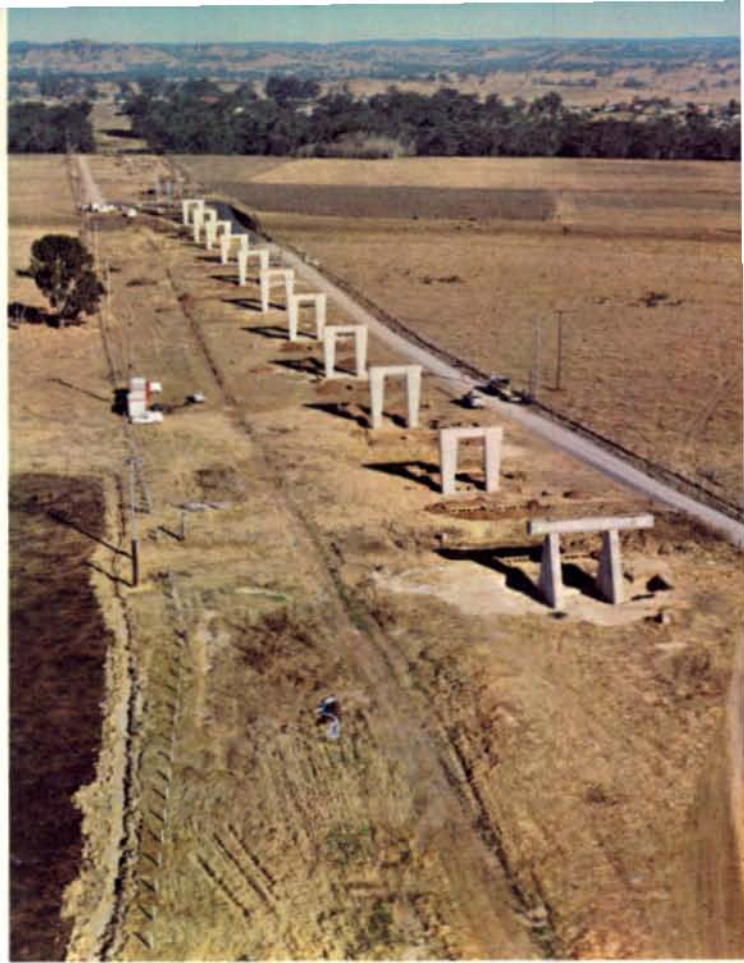
The overall effect of the floods and consequent damage placed a heavy strain on available funds, materials and manpower which had to be diverted from normal maintenance and construction works so that the roads could be re-opened as quickly as possible.

Some bridges and culverts were completely destroyed and sections of road were badly damaged and had to be closed for periods of up to several weeks. Nevertheless no areas were completely isolated as alternate routes were available.

The Government arranged for special grants to be available for this work and from its own resources the Department provided in excess of one million dollars.



Landscaping of the grassed slopes adjacent to the Southern Expressway at Wollongong has included the planting of many trees and shrubs.



Work in progress on the construction of the bridge over Nepean River at Camden. The approaches to this bridge will form a deviation of the Hume Highway to allow through traffic to by-pass both Narellan and Camden.

In all civil engineering construction works the natural or existing landscape is physically disturbed. This is particularly so on major works undertaken by the Department. Although effect on land is kept to the minimum consistent with the requirements of the work, there are, especially on expressway works, large areas that have been scarred but which are not actually part of the carriageways.

With the advent of large scale projects in recent years the Department has been aware of the need to reinstate these areas so that the roadway and the immediate surrounding areas blend harmoniously with the natural environment. The Department provides for this landscape treatment when its works are being planned and designed.

To restore the areas that have been damaged, roadside verges and medians are grassed, earthbatters and fills are landscaped and where practicable planted either with grass or ground cover plants. Trees and shrubs are planted in the larger grassed areas.

Indigenous trees and shrubs are planted as well as some exotic species which are known will flourish in the particular area.

This work is undertaken as far as possible while construction is in progress so that there is a minimum amount of landscaping required at the conclusion of the work.

Until recently the Department obtained advanced trees and shrubs from outside sources. With the extension of planting on such a large number of jobs and to ensure that there is an adequate supply of young trees to meet the needs the Department recently established a plant-holding nursery at its Yennora Works Office in Sydney's outer western suburbs. At this nursery, which occupies an area of two acres, plants purchased at seedling stage are advanced and made ready for transplanting into new landscape areas or for filling of gaps in older plantings, due to trees dying or vandalism.

During the year some 4,000 trees were planted in roadside areas and at the end of the year 29,000 advanced trees were held in stock for future planting. The work involved in landscaping, its development and subsequent maintenance, is now an accepted and very necessary part of the Department's operations and will ensure that the State's Highways and Expressways are finished to a high standard of aesthetic appeal.

FINANCE

RECEIPTS

The amount received from State sources, viz Motor Vehicle Taxation and Charges, the levy under Section 11 of the Main Roads Act and miscellaneous items was \$68,705,732. The amount received under the Commonwealth Aid Roads Act, 1969 was \$47,278,713, making a total of \$115,984,445 for 1970/71 or \$12,039,689 more than in 1969/70.

In addition, funds totalling \$14,134,176 were provided for special works or for works that could not normally be undertaken from ordinary revenue. This amount includes a special advance of \$2.4 million for restoration of roads and bridges damaged by floods. The total funds received for 1970/71 were thus \$130,118,621.

A total of \$47,278,713 was received under the Commonwealth Aid Roads Act, 1969. This is \$7,071,833 more than was received in 1969/70. The Commonwealth Aid Roads Grant was equal to slightly more than half the total expenditure by the Department on construction and reconstruction of roads and bridges.

Receipts from State Motor Vehicle Taxation amounted to \$38,395,519 and exceeded the previous year's level by \$1,748,686, an increase of 4.8%.

Charges for heavy commercial vehicles under the Road Maintenance (Contribution) Act, 1958 yielded \$16,841,326 or \$969,321 more than in the previous year.

Under Section 11 of the Main Roads Act, 1924 the Commissioner is empowered annually to issue a requisition on each Council in the County of Cumberland with respect to a rate on all property within Council's area at 5/24ths of a cent in the dollar on the Unimproved Capital Value on rateable land with a limit on the amount from each Council area related to between ten and fifteen percent of the total rate revenue. The percentage was fixed at 12% for the year 1970/71. The amount received by the Department in 1970/71 from this source totalled \$11,407,159.

\$9,000,000 was borrowed under Section 42A of Main Roads Act during 1970/71, or \$400,000 more than in the previous year. Loan receipts were used to assist in financing the cost of constructing:—

	\$
• Western Expressway	1,500,000
• Southern Expressway (Section between Waterfall and top of Bulli Pass)	2,317,811
• Prince's Highway	228,736
• Hume Highway	1,878,000
• Mitchell Highway	107,890
• Barrier Highway	681,966
• New England Highway	281,204
• Pacific Highway	839,322
• Oxley Highway	255,900
• Bruxner Highway	422,444
• Newell Highway	181,340
• Silver City Highway	243,985

A total of \$2,250,000 was provided from loans funds to finance the construction of the Section of the Southern Expressway between Waterfall and top of Bulli Pass and the bridge over the Hawkesbury River on the Sydney-Newcastle Expressway.

PAYMENTS

Total payments from the County of Cumberland, Country and Developmental Roads Funds amounted to \$132,501,128 or \$18,685,405 greater than for the previous year.

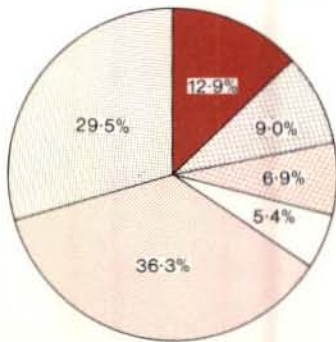
Maintenance and minor improvement of roads and bridges cost \$22,660,863 or 17.1% of the total expenditure.

In addition \$1,924,544 was expended from a special treasury advance to restore roads and bridges damaged by floods.

Construction, reconstruction and the acquisition of property for roadworks accounted for the major portion of the Department's expenditure. The amount expended on these works was \$90,229,016 or 68.1% of the total expenditure compared with \$79,999,116 in 1969/70.

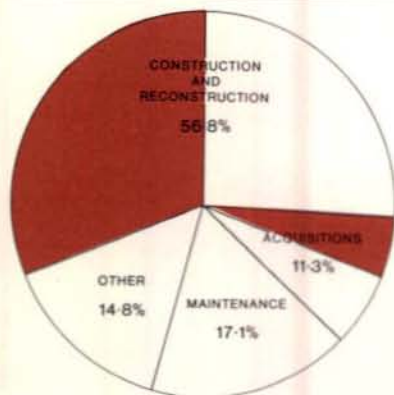
Loan charges, administrative expenses and other costs amounted to \$17,686,705.

In the case of the Country area of the State, contributions made by Councils towards the cost of Main Roads works do not pass through the Department's accounts and therefore are not included in the amounts stated above.



RECEIPTS for 1970-71

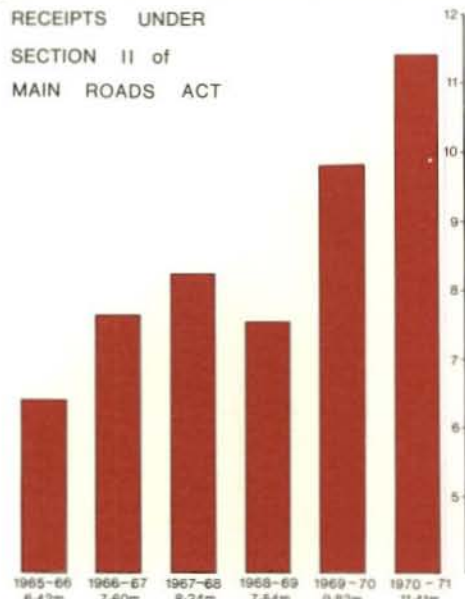
- Motor vehicle taxation
- Charges for heavy vehicles
- Council contributions and levy (Section 11)
- Commonwealth grant
- Loans
- Other



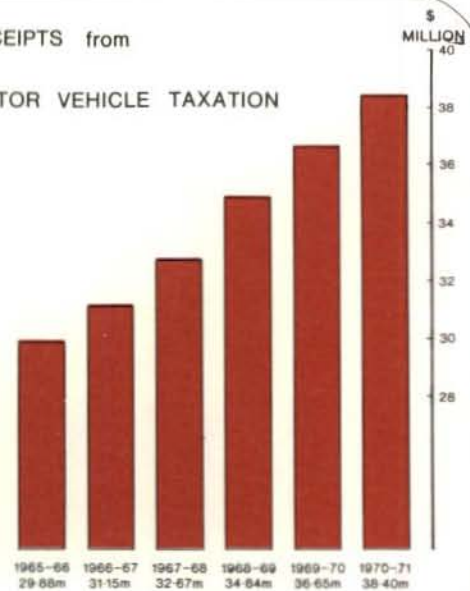
PAYMENTS for 1970-71

- STATE SOURCE
- COMMONWEALTH SOURCE

RECEIPTS UNDER
SECTION II of
MAIN ROADS ACT



RECEIPTS from
MOTOR VEHICLE TAXATION



STATEMENT OF RECEIPTS AND PAYMENTS

for the Year Ended 30th June, 1971

RECEIPTS

Motor vehicle taxation	12.2	22.6	27.8	47.2	47.4	147.5	12.9	14.2	20.2	47.2	47.2	47.2	12.4	14.2	14.2	47.2	47.2	47.2	47.2	14.2	14.2	14.2
Charges on commercial vehicles under the Road Maintenance (Contribution) Act, 1958																47.2	47.2	47.2	47.2	14.2	14.2	14.2
Levy upon Councils in accordance with Section 11 of the Main Roads Act, 1924																47.2	47.2	47.2	47.2	14.2	14.2	14.2
State Government Loans — Repayable																47.2	47.2	47.2	47.2	14.2	14.2	14.2
Loan Borrowings under Section 42A of the Main Roads Act, 1924																47.2	47.2	47.2	47.2	14.2	14.2	14.2
Contributions by Councils towards maintenance and construction of Main and Secondary Roads																47.2	47.2	47.2	47.2	14.2	14.2	14.2
Contributions by other departments and bodies towards maintenance and construction of Main and Secondary Roads																47.2	47.2	47.2	47.2	14.2	14.2	14.2
Commonwealth/State Government — Special Advance for Restoration of Flood Damage																47.2	47.2	47.2	47.2	14.2	14.2	14.2
Sydney Harbour Bridge Account for expressway approaches																47.2	47.2	47.2	47.2	14.2	14.2	14.2
Commonwealth Aid Roads Act, 1969 —																47.2	47.2	47.2	47.2	14.2	14.2	14.2
Urban Arterial Roads — Schedule 2																47.2	47.2	47.2	47.2	14.2	14.2	14.2
Rural Arterial Roads — Schedule 3																47.2	47.2	47.2	47.2	14.2	14.2	14.2
Other Rural Roads — Schedule 4																47.2	47.2	47.2	47.2	14.2	14.2	14.2
Planning & Research — Schedule 5																47.2	47.2	47.2	47.2	14.2	14.2	14.2
Other																47.2	47.2	47.2	47.2	14.2	14.2	14.2
																				Total Receipts		
Balance brought forward from last year	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	

PAYMENTS

Maintenance and minor improvements of roads and bridges	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2
Construction and reconstruction of roads and bridges	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2
Maintenance and construction of unclassified roads in the Western Division	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2
Restoration of flood damage	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2
Land acquisition	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2
Planning and research	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2
Administrative expenses	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2
Purchase of land and buildings for administration and operation	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2
State Government Loans —																					
Sinking fund payments	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2
Interest, exchange, management and flotation expenses	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2
State Treasury — Repayment of temporary advance	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2
Loan borrowings under Section 42A of the Main Roads Act, 1924 —																					
Repayment of principal	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2
Interest	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2
Other	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2
																				Total Payments	
Transfers to reserve for loan repayments	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2
Net transactions of operating and suspense accounts	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2
Balance carried forward	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2

* Credit

County of Cumberland Fund \$	Country Fund \$	Commonwealth Fund \$	Total \$	1969/70 \$
7,679,104	30,716,415		38,395,519	36,646,833
3,368,265	13,473,061		16,841,326	15,872,005
11,407,160	—		11,407,160	9,819,528
1,700,000	550,000		2,250,000	2,000,000
4,000,000	5,000,000		9,000,000	8,600,000
189,807	85,027		274,834	68,833
505,208	649,433		1,154,641	1,194,405
—	2,400,000		2,400,000	—
69,889	—		69,889	223,762
		32,740,000		26,070,000
		10,400,000		10,260,000
		3,168,713		3,016,880
		970,000	47,278,713	860,000
805,662	240,877		1,046,539	775,955
29,725,095	53,114,813	47,278,713	130,118,621	115,408,201
7,802,676	11,036,729	881,063	19,720,468	18,127,990
37,527,771	64,151,542	48,159,776	149,839,089	133,536,191
5,192,508	17,468,355		22,660,863	22,113,515
10,568,458	24,361,817	40,122,912	75,053,187	65,625,540
—	—	235,995	235,995	202,567
	1,924,544		1,924,544	
7,659,737	994,374	6,285,723	14,939,834	14,171,009
		893,554	893,554	314,854
3,073,299	4,299,804		7,373,103	6,132,648
873,276	874,128		1,747,404	1,926,560
14,440	166,261		180,701	166,475
181,530	958,269		1,139,799	1,031,875
100,000	100,000		200,000	200,000
202,366	123,136		325,502	214,381
639,031	771,189		1,410,220	927,718
313,849	457,557		771,406	596,960
28,818,494	52,499,434	47,538,184	128,856,112	113,624,102
134,175	147,076	—	281,251	225,465
1,809,270	1,554,496	—	3,363,766	33,844*
30,761,939	54,201,006	47,538,184	132,501,129	113,815,723
6,765,832	9,950,536	621,592	17,337,960	19,720,468
37,527,771	64,151,542	48,159,776	149,839,089	133,536,191

EXPRESSWAY CONSTRUCTION

The Department has planned a system of expressways for the transportation system in the County of Cumberland.

This planned expressway system will also link Sydney with the fast growing industrial centres of Newcastle in the north and Wollongong in the south. In addition, a connection would be made with the Hume Highway south west of Sydney for traffic between Sydney, Canberra and Melbourne. Construction works on the expressways commenced in previous years continued throughout the year and additional new expressway works were announced.

WESTERN EXPRESSWAY

The planned Western Expressway will extend from the City to the lower Blue Mountains.

The construction of the bridge over the Nepean River at Regentville, near Penrith, approximately two miles upstream from the existing Victoria Bridge on the Great Western Highway, was continued throughout the year. Concurrently with the construction of the bridge, the Department has continued expressway construction easterly and the completion of the section, between Russell Street, Emu Plains and Bringelly Road, Penrith, will coincide with the completion of the bridge at Regentville, in the latter part of 1971.

A further section of the Expressway, now under construction, will extend to Wallgrove Road at Eastern Creek and this is programmed to be available in the latter part of 1972. Later the Expressway will be extended easterly to join the Great Western Highway at the western end of Prospect Deviation.

The cost of construction of the whole of this work is estimated to be \$14 million.

During 1971, the Department commenced work on another section of the Western Expressway between Homebush and Granville. On this section, four miles in length, construction is already in progress on the bridges over Hill Road, King Avenue and Silverwater Road. These bridges are being built under contract to the Department. This portion of the Expressway, including bridge-works at eleven sites, is expected to cost approximately \$19 million and when completed will provide considerable relief for traffic in this highly industrialised district. It will also serve to meet the needs of traffic generated by the City Markets when they are relocated into this area.

SOUTH WESTERN EXPRESSWAY

Work continued during the year on the construction of a nine-mile section of the South Western Expressway from the Cross Roads near Liverpool, to the Campbelltown-Camden Road.

The work is being undertaken by the Department's own forces using hired plant and contractors for bridgeworks. Progress to date has mainly been associated with earth-works and bridgeworks.

Twelve bridges are required on this section of which one has been completed and five are under construction.

Construction of this section is scheduled for completion near the end of 1972 at an estimated cost of \$14 million. Approximately \$2 million of this sum is for land acquisitions and \$3.5 million for bridges and major culverts.

SOUTHERN EXPRESSWAY

The Southern Expressway is planned to provide a fast through route from Sydney to Wollongong and beyond towards Kiama.

Work is in progress between Waterfall and the top of Bulli Pass. When completed this section will link with the widened Prince's Highway at Waterfall, while at its southern end motorists will have the choice of using either the Prince's Highway via Bulli Pass or the Mount Ousley Road.

On the 7.5 mile section between Waterfall and Darke Forest Road, earthworks, drainage and fencing are being constructed for the Department by G. Abignano Pty. Ltd., for a contract price of \$3,411,295. The Department proposes to complete the pavement work with its own forces. The bridges required on this section will be built by contract.

The Department is preparing plans and specifications for the remaining length of the work between Darke Forest Road and the top of Bulli Pass and it is intended that tenders be invited for construction of earthworks, drainage and fencing, from registered contractors, during the latter part of 1971.

It is expected that construction between Waterfall and the top of Bulli Pass, will be completed by mid-1973 at a total cost of approximately \$15 million.

Work is in progress on the extension of the Expressway south of Wollongong, between Gladstone Avenue, Fig Tree and Northcliffe Drive, Berkeley. This section is approximately three miles long and will include the construction of two interchanges and bridges over a number of streams, at railway lines and at major cross roads.

The section is estimated to cost approximately \$7.6 million and is expected to be completed prior to 1974. Contracts totalling \$1.6 million have been let for major bridgeworks on the section from Gladstone Avenue to Five Islands Road.

SYDNEY-NEWCASTLE EXPRESSWAY

Approximately 16 miles of this Expressway have been constructed and operate as two separate tollworks: approximately ten miles north of the Hawkesbury and six miles south of the River.

A new six-lane bridge across the Hawkesbury River to link these two sections to make them fully effective as one unit is under construction. The foundations for the bridge were completed for the Department by John Holland (Constructions) Pty. Ltd., and in January, 1971, a tender was accepted from the Hornibrook Group for the construction of the superstructure at a contract price of \$2,966,848. The bridge is expected to be completed during the latter half of 1972.



*Clearing and excavation in progress on the Department's
Kings Cross Road Tunnel Project.*



Earthworks on the Waterfall-Bulli Pass Tollwork clearly define the route of this section of the Southern Expressway. The Princes Highway is pictured on the right of the Expressway.

Continuing construction on the Western Distributor from Sydney Harbour Bridge to Day Street (near King Street).



EXPRESSWAY CONSTRUCTION — CONTINUED

WESTERN DISTRIBUTOR

The Western Distributor will extend from Sydney Harbour Bridge to Ultimo, where it will connect with the Southern and Western Expressways.

Work on the first stage of the Western Distributor from the Sydney Harbour Bridge to Day Street between Erskine and King Streets was continued during the year. This work includes the construction of a concrete box girder viaduct 1,870 feet long and involves modifications to the layout of the existing street system and to the southern toll plaza of the Sydney Harbour Bridge. It is being carried out by contract to the Department by Dillingham Constructions Pty. Ltd. This work is due for completion in the latter part of 1972.

NORTH WESTERN EXPRESSWAY

The North Western Expressway will extend from the City at Drutt Street to Huntleys Point where it will connect with the Lane Cove Valley Expressway which extends to the Sydney-Newcastle Expressway at Wahroonga.

The first section which has already been constructed includes the Gladesville, Tarban Creek and Fig Tree Bridges and associated works.

The next section to be constructed will be from Drutt Street, City to Bridge Road, Glebe. Construction will be complex and difficult as the Expressway crosses the railway goods yards at Darling Harbour and connects to numerous city streets. Consequently, so as to make the facility progressively operational, construction will be divided into several major stages. It is expected that work on the first of these stages will be commenced late in 1971.

KINGS CROSS ROAD TUNNEL PROJECT

During the year, the Department commenced work on the construction of the Kings Cross Road Tunnel Project.

This project, when completed, will provide a four-lane roadway for through traffic from William Street, City to Bayswater Road near Nield Avenue, Darlinghurst. Two bridges to be constructed at Victoria Street and Craigend Place will form the portals of a tunnel approximately 800 ft. long at Kings Cross.

Associated work completed during the year included construction of an extension of Kellett Avenue between Bayswater Road and Kings Cross Road. Excavation for portion of the tunnel was also carried out by the Department's forces to permit construction of the bridge forming the eastern portal.

Construction of the bridge at Victoria Street, which will form the western portal of the tunnel, is programmed to commence early in 1972.

WARRINGAH EXPRESSWAY

The first section of the Warringah Expressway extends from the northern end of the Sydney Harbour Bridge to Miller Street, Cammeray and was opened to traffic in June, 1968. Considerable relief was thus provided for traffic in the street systems of the North Sydney area.

To meet the future needs of traffic north of the Harbour, a ten year construction programme for the completion of the Warringah Expressway was announced in April, 1970. Various segments of this Expressway, including a major bridge over Middle Harbour between Castlecrag and Seaforth, and expressway links to Gore Hill and Balgowlah, will be undertaken in six separate stages and are estimated to cost about \$70 million. The first section to be undertaken in this programme will be a short extension of the existing work from Cammeray to Naremburn.

Purchase of land is continuing and design for both road and bridgeworks is proceeding.

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 carried out included:—

- *Southern Access to International Airport*
Construction commenced on an additional access to Sydney (Kingsford Smith) Airport which will connect with the Prince's Highway, Arncliffe, via Marsh Street and West Botany Street, and link with General Holmes Drive at Tancred Avenue, Kyeemagh.
- *Prince's Highway*
The Department is constructing the first stage of the Sutherland By-Pass via Acacia Road, Kirrawee. Part of the work, between Oak Road and Auburn Street, has been completed.
The construction of dual carriageways between Heathcote and Waterfall has also been commenced and will connect with the Waterfall-Bulli Pass Tollwork now under construction.
- *Hume Highway*
Improvements to sections of the Hume Highway were achieved by the provision of drainage works at Ashfield and Warwick Farm. In addition to drainage works, construction was commenced on shoulders, kerbing and guttering, medians and sheeting with asphaltic concrete between Roberts Road and Stacey Street, Bankstown.
- *Great Western Highway*
The provision of dual carriageways was completed from Prospect Deviation to Mt. Druitt. Work is nearing completion on the further extension of the dual carriageway to Glossop Street, St. Marys. Also nearing completion is the easterly extension of the four-lane carriageway from Quarry Hill, Kingswood, across Boundary Creek.
- *Ryde Road*
The Department continued construction of a six-lane dual carriageway from Fontenoy Road to Waterloo Road, North Ryde and commenced an interim four-lane carriageway from Waterloo Road to Epping Road, North Ryde.
- *Military Road, Spit Road, Pittwater Road and Barrenjoey Road*
The Department commenced reconstruction and widening of Military Road between Spofforth Street and Spit Junction, and of Spit Road between Spit Junction and Punch Street in the Municipality of Mosman.
Reconstruction of Pittwater Road between Namona Street and Jacksons Road, North Narrabeen, was substantially complete, as also was the section of Barrenjoey Road between Darley Street and Polo Avenue, Mona Vale.

Reconstruction of Barrenjoey Road was in progress from Grandview Parade to Bardo Road, Newport.

- *Victoria Road*
Construction was commenced on the provision of a six-lane divided carriageway between Pemberton Street and Elizabeth Street, Parramatta.
- *Pittwater Road*
Warringah Shire Council commenced work on the first stage of reconstruction and widening between Mona Vale and Church Point.
- *Macquarie Street, Windsor*
The Department continued construction of a six-lane divided carriageway in Macquarie Street, Windsor.
- *Warringah Road*
Reconstruction and widening from Wakehurst Parkway to Allambie Road was completed by the Department and reconstruction was commenced to Daines Parade, Beacon Hill.
- *Carlingford Road and Epping Road*
Hornsby Shire Council continued reconstruction of Carlingford Road between Midson and Ray Roads. This will complete reconstruction to four lanes between Pennant Hills Road and Beecroft Road.
The Department completed widening to four lanes between Shrimpton's Creek and Lane Cove Road.

COUNTRY

Major works completed and under construction on State Highways in the country include:—

- *Prince's Highway*
Construction commenced on the Quaama deviation, 31 miles south of Narooma. When completed this deviation will by-pass the village of Quaama and form the approaches to the new bridge over Dry River.
Work continued on construction of the Kiah deviation which extends from the south of Eden to Kiah. The deviation will eliminate 3 miles of narrow winding road.
- *Hume Highway*
Widening of the pavement on improved alignment (including provision of climbing lanes) was continued on Razorback Range.
Earthworks operations were in progress for the construction of 5 miles of dual carriageways, south of Goulburn. This work includes the duplication of 2 bridges, which are well advanced, and the provision of 2 separate structures over the Main Southern Railway Line.
The construction of a grade separated intersection between 7.3 and 9.0 miles south of Goulburn was continued at the junction of the Hume and Federal



Work in progress on the reconstruction of the Mitchell Highway between 41 miles and 61 miles north of Bourke.



Reconstructed section of the Mid Western Highway immediately west of Blayney, incorporating climbing lanes, guard railing and edge lining.

ROAD CONSTRUCTION — CONTINUED

- Highways. Work is well advanced on all lanes as well as the overpass bridge, with 2 new lanes in operation under a primer seal.
- A commencement was made on the construction of a 3 mile deviation with dual carriageways around the village of Bowning, west of Yass. The deviation will avoid the poor alignment and grading and a narrow bridge in the village and will entail provision of twin bridges over Bowning Creek. The work will be proclaimed a motorway and access along the route will be restricted.
- **Snowy Mountains Highway**
On the Brown Mountain deviation, between Bega and Nimmitabel, the cutting at 38 miles from Bega was laid back for stability of the batter, involving 15,000 cubic yards of earthworks. Only 2.2 miles of the second coat of bituminous surfacing remain to be completed on the deviation.
 - **Great Western Highway**
At Yetholme, to the west of Lithgow, a 3 mile deviation was completed.
Work commenced on construction of another 3 mile deviation to the west of Lithgow, at Kirkconnell.
 - **Mitchell Highway**
North of Bourke, 5 miles of bituminous surfacing was completed and reconstruction commenced on the remaining 18 miles of this section.
Reconstruction commenced on a 3.5 mile section west of Bathurst and a 5 mile section west of Wellington.
 - **Barrier Highway**
Widening and reconstruction were commenced on a 3 mile section to the east of Cobar while 13 miles were completed to the west of the town.
A 10 mile section of the McCulloch's Range deviation to the east of Wilcannia has been completed and work has commenced on the remaining 29 miles.
A final bituminous seal was applied and revetment of shoulders and batters were carried out across the Darling River Flood Plain to the immediate east of Wilcannia across the Talyawalka Creek.
 - **New England Highway**
Work was completed on the construction of a 3 mile deviation extending from Tarro overbridge to the west of Beresfield. Another deviation, 5 miles in length, was also completed between Guyra and Llangothlin. Reconstruction was completed on sections near Murrurundi, Tamworth and Maitland.
Construction of climbing lanes was commenced on Ben Lomond Range, south of Glen Innes, and McDougalls Hill, west of Singleton.
 - **Pacific Highway**
A deviation to the north of Coffs Harbour at Kororo, which replaced a section of narrow pavement on sub-standard alignment, was opened to traffic. A section of the Highway extending northwards from the deviation is at present being reconstructed.
To the south of Macksville, another deviation was provided on the approach to the new bridge over Lower Warrell Creek. This work has eliminated a section of the road at Hunts Flat which is subject to flooding.

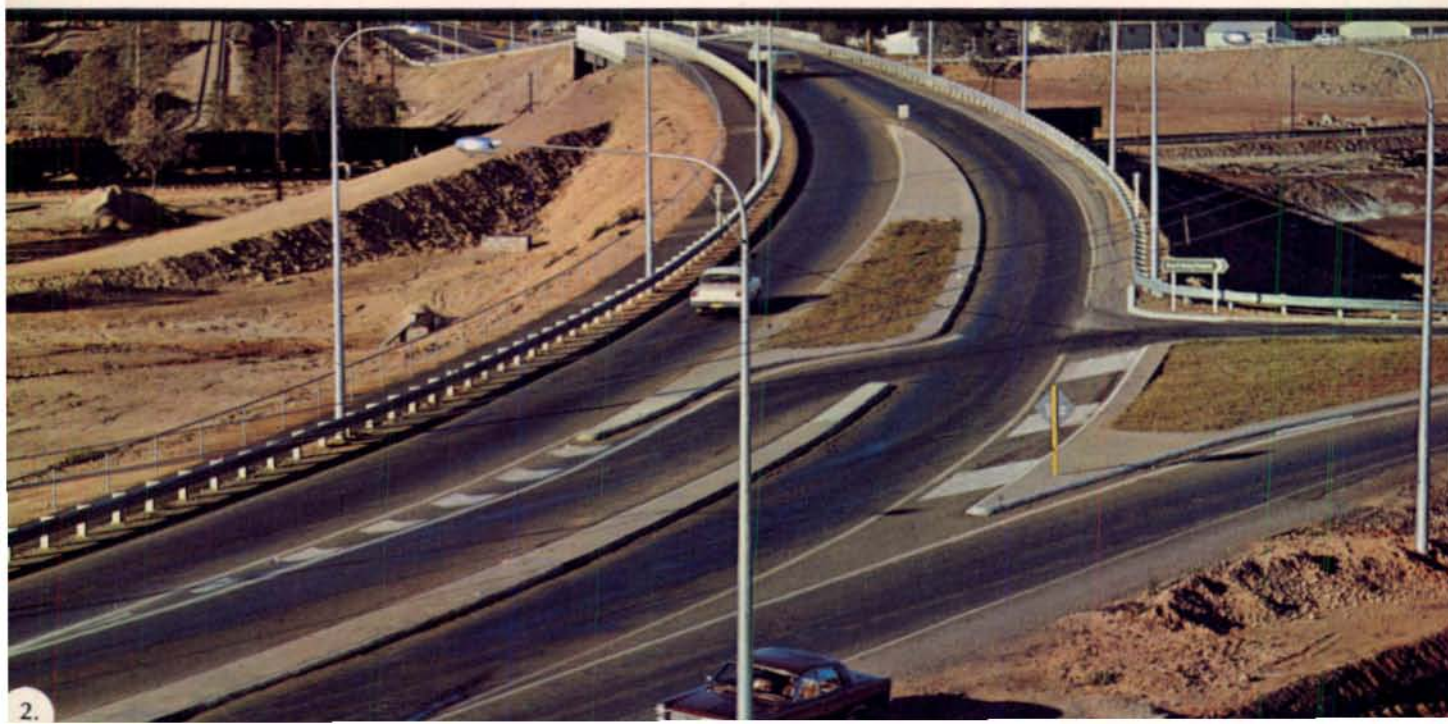
- The construction of a 3 mile deviation to the north of Grafton at Tabbimobile included the erection of a bridge to eliminate a section of road subject to frequent flooding.
- New climbing lanes were completed and under construction in the vicinity of Bulahdelah, to the north of Brunswick Heads, and on the Burringbar Range. Approximately 12 miles of the 22 mile section at present under construction at Bulahdelah has been completed.
- **Oxley Highway**
The completion of 4 miles of reconstruction work has extended the dustless surface to the west of Port Macquarie to a distance of 42.5 miles.
To the east of Walcha the bitumen surface has been extended to 22 miles, with the break between 13.5 and 17 miles, where the approaches to a new bridge over Stony Creek were nearing completion.
 - **Gwydir Highway**
Widening and reconstruction were completed on a section to the east of Wyallda by the Yallaroi Shire Council on behalf of the Department.
 - **Bruxner Highway**
Reconstruction was in progress on a 6 mile section to the east of Bonshaw and also on a similar length to the west of the town.
A 5 mile section to the west of Ballina was opened to traffic and construction was commenced on an extension of this section to link with the Ti-Tree Creek Bridge, now under construction.
 - **Newell Highway**
The Department proceeded with reconstruction of sections to the north of Moree and south of Narrabri. Earthworks were commenced on reconstruction of the intersection of the Newell Highway with the Oxley Highway.
Widening of the pavement was commenced to the north of Forbes and north of Jerilderie.
 - **Castlereagh Highway**
Reconstruction was completed from 33 to 36 miles north of Walgett. Work commenced on an extension to this section to provide a further 4 miles of bituminous surface.
 - **Monaro Highway**
The Department completed reconstruction of a 2.5 mile section south of Nimmitabel and another section to the north of Michelago Creek Bridge.
Earthworks were commenced on an 8 mile stretch from the Highway immediately to the south of the Bombala Municipal Boundary which, when reconstructed, will connect with the section provided during the year with a bituminous seal by the Bibbenluke Shire Council on behalf of the Department.
 - **Cobb Highway**
Final sealing work was completed on the reconstructed section between 4.7 and 8.2 miles north of Moama.

THE YEAR IN BRIEF



DURING 1970-71

- Bituminous surfacing was carried out on 1,210 miles of road, including 345 miles not previously sealed.
- The construction of 139 new bridge structures was completed and work was in progress at a further 166 sites.
- Seven railway level crossings were eliminated from the Main Roads System.
- A total of 21,302 miles of linemarking was undertaken on 14,971 miles of road.
- Channelised facilities for traffic were completed at 28 intersections and were under construction at a further 11 sites.
- Climbing lanes for slow-moving traffic were completed at 15 locations and were under construction at a further four sites.
- Two new roadside rest areas were completed bringing the total in use to 41.
- Almost 300,000 tests on materials, such as soils and gravels, were carried out at Departmental laboratories.
- A total of 15,529 road signs were manufactured at the Department's Central Workshop, Granville.
- Advisory speed surveys were carried out on 1,320 miles of roads.
- Traffic counters were installed at 114 new sites, bringing the total to 315 permanent and semi-permanent locations.
- Total expenditure amounted to over \$132.5 million.





ILLUSTRATIONS

1. Rest area constructed by the Department on the Cobb Highway at the Lachlan River, near Booligal.
2. Channelised intersection at South Road, Broken Hill and associated railway overbridge.
3. New bridge to carry the Western Expressway over the Nepean River at Regentville.
4. Construction of dual carriageways on the Western Expressway west of Bringelly Road.
5. The Mitchell Highway west of Wellington after reconstruction and widening.

BRIDGE CONSTRUCTION

During the year, the Department and Councils completed the construction of 139 structures on classified roads and at sites on unclassified roads where the Department is responsible for the construction of crossings. These structures consisted of 60 bridges and 79 box culverts of bridge size (i.e. with a waterway width of 20 feet or more). The total length of these structures was 12,694 feet. In addition, widening or the construction of footways was completed on 20 bridges.

The classifications of the roads on which the structures were completed were as follows:—

Classification of Road	Bridge	Bridge-size Culvert	Total
Expressways	—	—	—
State Highways	26	34	60
Trunk Roads	6	9	15
Ordinary Main Roads	19	32	51
Developmental and Unclassified Roads	9	4	13
Country Roads (Future Main Roads)	—	—	—
Total	60	79	139

Of these bridges, 28 were built by the Department (14 by contract) and 30 by Councils (21 by contract). The 2 remaining bridges were built by the Department of Railways.

Thirty of the bridge-size culverts were built by the Department (2 by contract) and 49 by Councils (14 by contract).

Some of the large bridges completed during the year included:—

- Black Bobs Creek, 93.75 miles south of Sydney, on the Hume Highway. A new 4-span reinforced and prestressed concrete bridge, 280 feet long, to replace a 20 feet span stone arch bridge.
- Lower Warrell Creek, 2 miles south of Macksville, on the Pacific Highway. A new six-span prestressed concrete bridge, 752 feet long, to replace an old timber bridge 144 feet in length.
- Pacific Highway, 10.5 miles south of Woodburn (Tabbimobile). A six-span, two-lane reinforced and prestressed concrete bridge, 211 feet long, to replace a causeway.
- Black Creek, 80 miles west of Ballina, on the Bruxner Highway. A two-lane, reinforced and prestressed concrete bridge, 240 feet long, on a deviation of the Highway.
- Tuckers Creek at Wentworth on the Silver City Highway. A new five-span, two-lane steel and concrete bridge, 362 feet long, to replace a timber bridge 301 feet long.



New bridge over Black Bobs Creek on a deviation of the Hume Highway, 7 miles south of historic Berrima.

- Edward River at Moulamein, on Main Road No. 319. A new six-span, two-lane reinforced concrete and steel bridge, 316 feet long, to replace a narrow timber bridge, 356 feet long.
- Billabong Creek, 5 miles north of Walla Walla, on Main Road No. 547. A new seven-span, two-lane reinforced concrete bridge, 390 feet long, to replace an old timber bridge, 110 feet long.
- Pedestrian Bridge over Pacific Highway, 4.2 miles north of Coffs Harbour. A new prestressed concrete footbridge, 216 feet long, over a deviation of the Pacific Highway at Kororo.

At the close of the year 102 bridges and 64 culverts of bridge-size were being constructed on classified roads by the Department and Councils.

These include the bridges over the Nepean River at Regentville on the Western Expressway; the Nepean River at Camden on a deviation of the Hume Highway; the Hawkesbury River at Peats Ferry on the Sydney-Newcastle Expressway; the North Channel of the Hunter River at Stockton to replace The Stockton Ferry; the Georges River at Alford's Point; Cooks River at Arncliffe, adjacent to the new International Airport Terminal; Macquarie Rivulet, 13.5 miles south of Wollongong; Lake Illawarra at Windang; the south arm of the Bellinger River at Urunga; and twin structures over Cockle Creek at Teralba as well as a large number of bridges associated with the Department's extensive expressway works.



Construction of new bridge over the North Channel of the Hunter River to link Kooragang Island and Stockton Peninsula.

ROAD CLASSIFICATION AND MILEAGE

The total mileage of Expressways, State Highways, Trunk Roads, Main Roads, Secondary Roads, Tourist Roads, Developmental Roads and unclassified roads for which the Commissioner is responsible, in New South Wales, is 27,060 miles.

The mileages of roads within the various classifications, as at 30th June, 1971 are:—

Expressways	27 miles*
State Highways	6,536 miles
Trunk Roads	4,332 miles
Main Roads	11,513 miles
Secondary Roads	170 miles
Tourist Roads	243 miles
Developmental Roads	2,670 miles
Unclassified Roads	1,569 miles

*This total excludes three miles of expressway standard road which is included in the mileage of Main Roads.

The lengths of the various types of surfaces on these roads throughout the State at 30th June, 1971, were:—

Natural surface	252 miles
Formed only	4,989 miles
Gravel	7,375 miles
Prime	35 miles
Primer Seal	197 miles
Sprayed Seal	13,026 miles
Slurry Seal	4 miles
Bituminous Plant Mix	1,059 miles
Cement Concrete	123 miles
	<hr/> 27,060 miles <hr/>

BITUMINOUS SURFACING

The total length of dustless surface on the State's Main Roads System (together with some unclassified roads for which the Department is responsible, generally located in the unincorporated area of the State) is now 14,444 miles. This is an increase of 428 during the last year.

During the year, bituminous surfacing work was carried out on:—

Expressways	2 miles
State Highways	522 miles
Trunk Roads	177 miles
Main Roads	474 miles
Secondary Roads	12 miles
Tourist Roads	8 miles
Developmental Roads	9 miles
Unclassified Roads	6 miles

The total length of 1,210 miles involved 2,534 lane miles or the equivalent of 1,267 miles of normal two-lane road.

The Department was the constructing authority for 546 miles (1,167 lane miles) of bituminous surfacing of which 490 miles (1,055 lane miles) were done by direct control and 56 miles (112 lane miles) by contract.

Councils were the constructing authority on behalf of the Department for 664 miles (1,367 lane miles) of bituminous surfacing of which 84 miles (180 lane miles)

were done by direct control and 580 miles (1,187 lane miles) by contract.

The work comprised:—

89 miles of bituminous plant mix surfacing	(277 lane miles)
1,012 miles of sprayed seal	(2,038 lane miles)
82 miles of primer seal	(163 lane miles)
27 miles of prime	(56 lane miles)

The bituminous surfacing carried out during the year was in four categories:—

- *Initial Surfacing* of 345 miles (691 lane miles) of road not previously provided with a dustless surface.
- *Heavier Treatment*, either sprayed seals or plant mix surfacing, provided on 69 miles (139 lane miles) of road pavement previously provided with a light treatment such as a prime or primer seal.
- *Restoration* of bituminous surfaces following reconstruction
 - to widen and/or strengthen the pavement on 57 miles (127 lane miles),
 - to provide additional lanes or dual carriageways on 27 miles (87 lane miles),
 - to improve alignment and/or grading on 81 miles (182 lane miles);
- *Maintenance Resurfacing* of 631 miles (1,309 lane miles) of road pavement.

ADVANCE PLANNING

Planning, to determine the future needs of the State's Main Roads System, continues to form an essential part of the Department's activities. In this regard the Department, together with the other State Road Authorities, has undertaken several Road Needs Surveys on behalf of the National Association of Australian State Road Authorities.

It is proposed that a further survey, designated as the Australian Roads Survey 1969-74, be carried out to provide information relating to the effects of implementation of the Commonwealth Aid Roads Act, 1969 and to assess road needs for a period of five years beyond 30th June, 1974, when the current Act terminates. Throughout the year the Department has taken part, with the other State Road Authorities and the Commonwealth Bureau of Roads, in planning for this further survey. Collection of survey data by the Department and Local Government Authorities in New South Wales will commence shortly and proceed throughout most of the year 1971/72.

Work has continued in connection with the statistical

investigation of the costs of construction, maintenance, and administration of roads with the object of compiling road cost index series.

Computing and data processing for technical purposes, principally in the fields of bridge design, traffic analysis, surveying, road inventory and road investigation continued to be carried out on a computer located in the Advance Planning Section.

Throughout the year, use of the Automatic Drafting System coupled to the computer was developed to include the plotting of road longitudinal and cross sections, photogrammetric control points and traffic flow maps. Survey plan drafting continued as the principal application of automatic drafting.

Towards the end of the year, orders were placed for the hire or purchase of additional computing equipment to further the development of the Department's technical computing and postpone shift operation.

Use of the equipment has already produced substantial cost savings as compared with computation and data processing by manual methods.

LAND SURVEY AND PROPERTY ACQUISITION

The purchase of property required for roadworks is a major operation, especially in highly developed urban areas, where extensive roadworks are planned to meet traffic requirements.

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 Office, valuation of properties, negotiations to determine satisfactory settlements and conveyancing procedures.

Surveys are first carried out to establish the new boundaries of the land which has to be acquired to accommodate new and widened roads. In the County of Cumberland during the year, a total of 71 surveys was performed by the Department's surveying staff and by contract, covering a total length of 21.7 miles. Outside the County of Cumberland, 92 surveys were carried out by the Department and by contract on a total length of 195.8 miles.

To undertake the necessary valuations the Department employs 44 staff valuers and engages the services of 25 private valuers who work on a contract basis. In addition, 51 draftsmen, aided by drawing office assistants, are employed to complete plans from information supplied by the Department's surveyors.

In the year under review, 220 plans, involving 416 separate sheets, were completed and lodged at the Registrar General's Department to enable the Department's proposals to be implemented. Included in the lodged plans were those required in connection with

nine realignment proposals affecting 9.2 miles of roads within the County of Cumberland and four proposals affecting 3.8 miles in the country areas of the State.

During the year the Department completed the acquisition of properties necessary for the construction of the Western Distributor. In addition, acquisitions were almost completed or were well advanced in connection with the Waterfall-Bulli Pass Tollwork, the South Western Expressway at Campbelltown, the first stage of the William Street Underpass and the Western Expressway on the section between Emu Plains and Eastern Creek and at Auburn. Vacant possession of resumed areas at Kings Cross was obtained and demolition of improvements were almost completed. Acquisition of further areas at Kings Cross is at present being negotiated. Acquisitions prior to the commencement of the first stage of the North Western Expressway and the extension of the Warringah Expressway were in progress during the year.

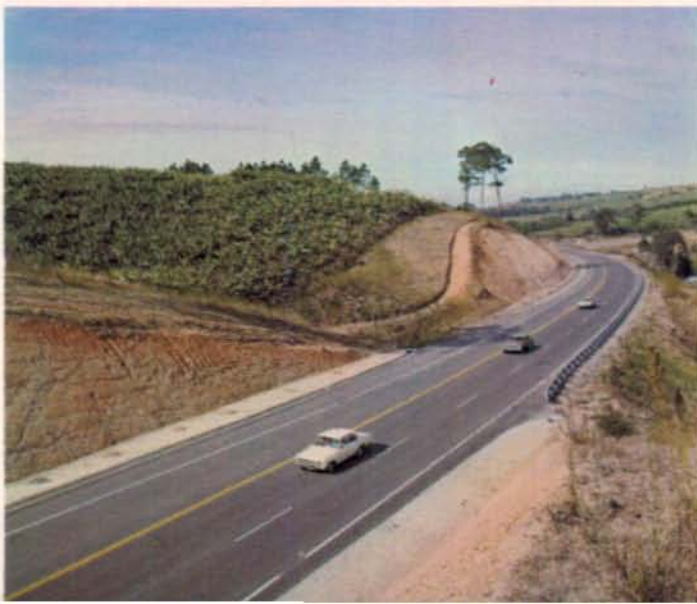
The value of property acquired by the Department during the year amounted to approximately \$9.5 million in the County of Cumberland and approximately \$1.1 million elsewhere in the State. Compensation paid in respect of resumption at Kings Cross amounted to another \$4.2 million.

This large expenditure on properties and the staff effort in consequent negotiations have meant that of necessity the Department is unable to meet the desires of all who would wish the Department to purchase their properties ahead of the time they are needed for current works programmes.

A channelised intersection at the junction of the Hume Highway and the Sturt Highway near Tarcutta.



New bridge over Tuckers Creek near Wentworth on the Silver City Highway.



The recently completed deviation of the Pacific Highway, approximately 3.5 miles north of Coffs Harbour, designed to eliminate the many low radius curves in that area.

DIVISIONAL ADMINISTRATION

The Department's responsibilities in the field are exercised by Divisional Engineers, who supervise all works on Main Roads throughout the State, including those under the Department's direct control and those carried out by Councils.

At present, there are eighteen Divisions within the Department. Fourteen have their Divisional headquarters in country centres and two are located in the Sydney Metropolitan Area. The remaining two were set up for particular tasks of expressway construction in the County of Cumberland.

This decentralised administration, commenced in 1928, facilitates close co-operation with Shire and Municipal Councils throughout the State and ensures that local needs and conditions are constantly under observation. Field works undertaken by the Department are controlled from Works Offices, the Works Engineer at each office being responsible to the Divisional Engineer concerned. The locality of these Works Offices, especially those engaged mainly on construction, is changed from time to time as major works are undertaken in different areas.

The Divisional Engineers and the headquarters of the Divisions as at 30th June, 1971, were as follows:—

<i>Division</i>	<i>Headquarters</i>	<i>Divisional Engineer</i>
Metropolitan	Milson's Point	B. J. Sexton
Parramatta	Parramatta	L. R. Browne
Central Mountains	Lithgow	J. H. Dearden
Illawarra	Wollongong	G. A. Thompson
Hunter Valley	Newcastle	E. M. Brown
Lower North Coast	Port Macquarie	T. P. Desmarchelier
North Eastern	Grafton	W. J. Brecht
Upper Northern	Glen Innes	B. Moon
North Western	Tamworth	K. Edgar
Central Western	Parkes	N. A. Waslin
Central Northern	Bourke	R. A. Dubedat
Murray Darling	Broken Hill	D. H. Francis
Central Murray	Deniliquin	L. R. James
South Western	Wagga Wagga	C. N. Penney
South Coast	Bega	E. K. Twardz
Southern	Goulburn	J. B. Anderson
Inner Expressway Construction	Head Office	H. B. Korff
Outer Expressway Construction	Head Office	E. King

TRAFFIC SERVICE

During the year, 7.8 miles of median strip was constructed, of which approximately 46% was in the Sydney Metropolitan Area. The remainder was constructed in the City of Newcastle, the Municipality of Queanbeyan and the Shires of Wyong and Lake Macquarie.

Channelised facilities for traffic were completed at 28 intersections and, at the end of the year, work was in progress at a further eleven sites. In addition, designs were prepared for future channelisation of traffic at 40 intersections.

Ten special parking bays were provided on Main Roads to permit buses to stop clear of moving traffic. Seven of these were in the Sydney Metropolitan Area, while the remainder were in the Shires of Colo, Coffs Harbour and Stroud.

Climbing lanes for slow-moving traffic were constructed at 15 locations. In addition, work was commenced to provide linking lanes at a further four sites.

Work has continued on improvements to the signing of the Main Roads System throughout the State. At intersections in rural areas emphasis was given to the replacement of finger boards, carrying a multiplicity of town names, by large reflectorised signs showing only the names of key towns along each route. The names of smaller towns are given on reassurance signs which are located at convenient places beyond intersections.

In conformity with a national policy for colour coding of signs, the Department has adopted blue signs with white letters to indicate services available to motorists, such as rest areas, fireplaces and parking areas. It has also adopted a brown colour with white letters for tourist signs and has approached all Councils with a suggestion that local scenic and historic routes be marked with a Standard Tourist Route Marker and be numbered, using the white on brown colours.

The use of raised pavement markers in lieu of painted lane lines on expressways and major urban arterials was continued. In addition, experimental work was undertaken in rural areas to test the effectiveness of the use of widely spaced reflective pavement markers on the road centreline as an alternative means of road delineation at night. In urban areas amber reflective markers adjacent to median strips have been found to be an effective means of median delineation.

The special investigation of the sites of fatal accidents on State Highways, which was commenced in 1966, was continued. An analysis of accidents on the Sydney-Newcastle Expressway for the year ended 31st December, 1970 showed that no fatal accidents occurred and that there were only 1.59 accidents per million vehicle miles of travel involving injury and property damage. The accident rate on the Expressway appears, therefore, to be less than a quarter of the average figure for other roads of New South Wales.

Advisory speed surveys were undertaken on 1,320 miles of road, of which 380 miles required re-survey due to new speed limits. To date a total of 7,150 miles of roads has been surveyed or re-surveyed due to speed limit changes throughout the State.

RESEARCH AND MATERIALS TESTING

The construction of modern roads requires constructing authorities to undertake considerable and continuing research into new techniques and developments, and to carry out tests on materials used, in order to ensure that the highest possible standard of road pavement is provided for the high performance cars and heavy commercial vehicles now using them. This is a very important phase of the Department's operations.

In addition to the Materials and Research Laboratory situated at Milson's Point, sixteen Divisional Laboratories and twelve subsidiary laboratories operated during the year, as well as a number of vehicles fitted as mobile units for field testing.

A new job control laboratory was established at Waterfall to perform the tests required on the construction, by contract, of the Southern Expressway and a small laboratory was operated for about three months at Jindabyne, for sampling and testing bituminous mixes being supplied for Main Road No. 286. A new concrete curing room was established at the Grafton Laboratory and portable concrete curing rooms were installed at expressway construction laboratory sites.

The number of tests carried out at the Materials and Research Laboratory, during the year, was 79,565. The main materials processed were soils, gravels, aggregates, concrete, bitumen, bituminous mixes, paints, steel and rubber bearings. The number of samples processed at Divisional and Works Office laboratories was 47,445. This involved about 220,000 tests, the majority of which were on soils and gravels. Approximately 2,325 percent pre-cast concrete culvert and bridge units were load tested and field control operations necessitated about 14,730 density in situ and 11,875 moisture content tests.

Apart from this testing of the many types of materials used in road engineering, an extensive programme of research is being carried out continuously. Investigation was continued into the properties of fine crushed rock materials used for pavement construction in Sydney and nearby areas and a test procedure was adopted to discriminate between material expected to perform satisfactorily and those prone to deteriorate rapidly in service. Further work carried out during the year on the stabilisation of such materials has led to the development of a specification requiring the inclusion of lime and limiting of the amount of pozzolanic material permissible.

Skid resistance research included two field trials of a fine textured bituminous surfacing consisting of an aggregate of crusher run river gravel and a binder of bitumen and tar. This blend was found to slowly degrade with oxidation so that new aggregate faces are continually exposed to traffic, thereby maintaining a high level of skid resistance.

Laboratory work was carried out on the properties of high temperature coke oven tars and field trials of tar-aggregate mixes were commenced. Other field trials included the use of foamed bitumen premixed surfacings and foamed bitumen stabilisation of sandy materials. A test vehicle was fitted with a prototype N.A.A.S.R.A. Roughness Meter and field investigations were commenced into its operation, calibration, evaluation and applications.

ELIMINATION OF RAILWAY LEVEL CROSSINGS

Seven railway level crossings were eliminated from the Main Roads System during the year. Two of these were eliminated by the construction of overbridges and the other five were accounted for by the construction of road deviations.

The overbridges to replace the level crossings were constructed at the following locations—

- Main Road No. 129, 4.5 miles north of Coonabarabran
- Trunk Road No. 61 at Ootha, 41.5 miles west of Parkes.

Five other level crossings were eliminated from the Main Roads System by the construction of deviations on the following roads—

- New England Highway (State Highway No. 9). Crossings were eliminated at Guyra and Llangothlin
- Dubbo—Dunedoo Road (Main Road No. 206). Two level crossings were replaced at Spicers Creek, 32 miles from Dunedoo
- Main Road No. 289, at Nooroo.

Since the Main Roads Act came into effect in 1925, a total of 188 level crossings has been eliminated from Main Roads. There remain 377 crossings on Main Roads comprising 324 on New South Wales Government Railway Lines, 42 on privately-owned railways and 11 on Victorian Government Railways which extend into New South Wales.

During the year, safety conditions were improved at a number of level crossings by the provision of automatically operated flashing lights at seven sites, the widening of crossings and their approaches, and the realignment of approaches at other locations.

A deviation of the Sturt Highway being constructed at Guys Hill near Wagga Wagga.



MAINTENANCE OF ROADS

During the year, Main Roads throughout the State were maintained in a satisfactory condition. The Department ensures that the standard of maintenance is commensurate with the type of road and the volumes of traffic carried.

In the County of Cumberland rainfall throughout the year was higher than normal and during the summer months was twice the average figure. This caused deterioration of lengths of roads which had to be restored. The humid summer weather also produced exceptional roadside growth which increased the work necessary to keep roadsides and medians in good order. The increasing volume of heavy commercial vehicles is causing the development of corrugations in asphaltic concrete surfaced roads at various locations in the Metropolitan area. The corrugations adversely affect the riding qualities of the road and also detract from the amenity of the area in which they occur by contributing to the problem of traffic noise. Removal of lengths of severe corrugations by the use of a burner planer was carried out at two locations during the year and similar work will be carried out as the need arises.

It was found that the Moreton Bay Fig Trees in the median of the Cahill Expressway were becoming a danger to traffic due to the dying of some of the long branches overhanging the carriageway. Extensive pruning and tree surgery was necessary for traffic safety and to preserve the trees which are a notable feature of this road.

In the country major flooding was widespread during the year. The only areas not affected by flooding were the Mid North Coast and around Goulburn and Deniliquin. These areas, however, all experienced prolonged periods of wet weather. The flooding caused

extensive damage to roads and a number of bridges and culverts were also damaged. The timber bridge over Narira Creek on Main Road No. 320 between Cobargo and Bermagui and the timber bridge over Candelo Creek at Candelo on Main Road No. 270 were destroyed by floods. Many roads were closed by flood waters for periods varying from a few days to several weeks and some sections of roads in the western area of the State were still not trafficable at 30th June, 1971.

Levee banks were constructed on either side of the Barrier Highway immediately east of Wilcannia to ensure that the Highway was closed to traffic for the shortest possible time as a result of the high floods which occurred in the Darling River and Talyawalka Creek early in 1971.

Improvement to sign posting was actively pursued during the year and new direction, warning and information signs were erected. Where necessary, existing signs were replaced by more appropriate signs.

Snow clearing operations were carried out during the year. Maintenance and snow clearing of selected unclassified roads in the Kosciusko National Park were undertaken on behalf of the National Parks and Wildlife Service.

Two new roadside rest areas were completed in 1970/71, one on the Hume Highway at Black Bobs Creek, the other on the Oxley Highway at Hickeys Falls. There are now fifty-two roadside rest areas completed or authorised for construction.

During the year, 14,971 miles of roadway were line-marked. With lane marking of 4,199 miles and edge marking of 2,132 miles, a total of 21,302 miles of line-marking was undertaken.

INDUSTRIAL RELATIONS AND TRAINING

The Department's operations are carried out on a State wide basis and it employs a considerable work force. At the close of the year a total of 14,953 persons were employed on Main Roads works. They comprised 9,593 direct employees of the Department, 1,603 employed by contractors to the Department, and 3,757 employed by Shire and Municipal Councils and by contractors to Councils.

Throughout the year harmonious relations continued between the Department and its employees and no major industrial dispute occurred.

SERVICE TRAINING

Five senior officers of the Department were sponsored to attend Administrative Staff Courses at the Australian Administrative Staff College at Mt. Eliza, Victoria, and at the Institute of Administration, University of New South Wales. A total of 55 Departmental officers has now been sponsored to such courses.

The Department's policy of encouraging its officers to attain recognised external tertiary qualifications to fit them for more responsible duties was maintained during the year.

Details of the studies undertaken were:—

Full-time Students: 140 trainees were sponsored at the Universities of Sydney, New South Wales and Newcastle undertaking degree courses in Engineering, Science and Surveying.

Part-time Students: 659 officers undertook study at various educational institutions in 28 different courses.

Scholarships: Four scholarships were awarded to clerical officers to complete their part-time studies in Arts, Commerce, Information Processing and Public Administration.

Apprentices: 41 employees were indentured to the Department in nine trades.

In addition, the Department conducted in-service training courses at its Training Centre, Head Office. A total of 154 persons comprising clerical officers, typists and machine operators attended courses during the year. A further 312 newly appointed officers received instruction in accordance with the Department's Formal Induction Programme. The Department's Training Officers visited field offices to provide instruction on the introduction of the Computerised Payroll and Stock Control Systems and to provide "follow-up" training to that provided in the Training Centre.

SCHOOL FOR TECHNICAL TRAINING

Six separate courses were conducted by the School for Technical Training during 1970-71. Details of these courses are as follows:—

Induction Courses for Graduands: On 8th December, 1970, an induction course for the Department's graduands Engineers and Surveyors was held.

Residential Course for Field Engineers: In September, 1970, a two-week course in Road and Bridge Construction and Maintenance was held. The course was conducted at the Residential Centre at University of New South Wales, Little Bay.

Induction Course for Divisional Office Engineers: On 4th February, 1971, the first induction course for Engineers, moving from field work to the administrative work of Divisional Offices was held in the School.

Divisional Engineering Conferences: A programme of eight subjects was produced, each subject covered by detailed lecture notes. Each conference was conducted on a group discussion basis, and was held at Divisional centres throughout the State.

In-Service Training for Road Foremen: The training of the first group of Road Foremen was completed and the second group received their full in-service training course. To date 48 Road Foremen have completed their in-service training.

In-Service Training of Bridge Foremen: The training of the first group of Bridge Foremen was completed and the second group received their full course of in-service training. A total of 46 Bridge Foremen has completed this course since its commencement.

TRAINING OF PLANT OPERATORS

The training of plant operators has been carried on as in previous years by six foremen who are based at the Department's Central Workshop, Granville, and make instruction trips of up to three weeks duration to Works Offices throughout the State. The policy of training potential plant operators to be available as relief operators when required, has been continued.

During the year instruction was given on 1,264 different types of plant items including varieties of Graders, Tractors, Rollers, Loaders and Back-Hoes, Self-loading Scrapers and Snow Blowers.

WEIGHT OF LOADS ON MAIN ROADS

Overladen vehicles are the cause of serious damage to road pavements. Ordinance No. 30C of the Local Government Act, 1919 limits the gross load and individual axle loads imposed on road pavements and structures and on ferry vessels by vehicles using Main Roads. The Department employs a number of Field Inspectors to check vehicles for overloading under this Ordinance. The Department's main concern in this regard is the protection of the pavements of Main Roads from damage.

During the year, a total of 46,938 vehicles were stopped and 9,824 vehicles, or 20.9%, were found to be loaded in excess of the limits. Prosecutions were undertaken in the majority of these cases; 5,913 convictions were recorded and appropriate penalties were imposed. An increase, of approximately 6.8%, occurred in the number of vehicles stopped for checking. This enabled the Department to detect a further 24.5% of overloaded vehicles in comparison with the previous year.

In cases where it is necessary to move excessively heavy freight of an indivisible nature, special permits are issued to cover these movements and during the year 6,425 permits of this nature were issued. This particular phase of the work is done with the close co-operation of the New South Wales Police Traffic Branch.

During the year five off-road weighing sites were provided. These sites, adjacent to the roadway, provide heavy duty, all-weather facilities for the weighing of heavy vehicles on portable Hi-Way Loadometer weighing devices.

Modifications were carried out on the Department's Weighbridge at Hexham which involved the dismantling and movement of the Department's Gosford Weighbridge to Hexham for coupling with the existing weighbridge to form a two plate combine weighbridge. Early in 1971 construction was commenced on a new weighbridge installation on State Highway No. 9, New England Highway near Kankool.

During the year Departmental Inspectors assisted in the Commonwealth wide N.A.A.S.R.A. Axle Surveys. These surveys not only recorded the axle loads but also vehicle, body and engine types, tare and gross weights, vehicle and load dimensions etc.

To assist drivers of heavy vehicles to stop safely when required to do so for a weight check, a sign advising of "Truck Inspectors Ahead" was introduced. This sign is placed on the roadway on the approach to sites where Inspectors display the "Stop" sign.



Departmental Weights of Loads Inspectors examining vehicle and driver documents during a roadside weight check.

The Department offers advice to the motor industry by means of forms which set out the requirements of Ordinance No. 30C and allow assessment of the weight that may be permitted to be carried on a particular vehicle. It also assists Councils who desire to enforce Ordinance limits within their areas.

Despite the Department's efforts to reduce the cost of maintenance of road pavements and bridges from damage through overloaded vehicles, the present percentage of overloaded vehicles still reflects a regrettable lack of co-operation from some owners and drivers.

It is also regretted that almost all Councils in the State neglect to police the loadings of vehicles using Main and Trunk Roads. There is no doubt that maintenance costs on these classified roads would be reduced if this were done. In spite of 103 Councils having members of their staff duly authorised officers, for the apprehension of offenders under Ordinance 30C of the Local Government Act, only four Councils have taken positive steps to ensure that the assets created for normal travel by motor vehicles are protected from damage by unauthorised heavy loads.

PLANT AND MOTOR VEHICLES

The Department is a major constructing organisation and, consequently, the use of a wide variety of mechanical equipment plays a major role in its operations.

Plant to the value of more than \$3.3 million and motor vehicles to the value of more than \$1 million were purchased by the Department during the year to replace existing items and to provide for additional needs.

The new Dual Lane Automatic Trimmer Spreader was placed in service on the Western Expressway near St. Marys. The machine is used for trimming subgrades, spreading and trimming road base material and paving with asphalt to a width of 24 feet.

The Department's Central Workshop located at Granville continued its activities in plant repairs, ferry overhauls, manufacture of signs, property repairs and building work, plumbing, electrical and transport services as well as extensive structural steel work for use in bridge construction. A total of 6,810 jobs were completed by the Workshop during the year at a cost of \$3,160,375.

During the year, new workshops were established at St. Marys and Thornleigh and there are now 41 workshops located throughout the State where field repairs and services are carried out.

The Department's automatic trimmer-spreader in operation on the Western Expressway near Bringelly Road.



Section of the extensive technical reference library at Head Office.

ROAD PLANNING AND LOCATION

The review of outline designs for new expressways and surface roads contained in the Main Roads Development Plan, within the County of Cumberland, was continued during the year. Included in this review were parts of the Southern and North-Western Expressways, the St. Ives-Dee Why route, the Johnstones Creek route between Rozelle and Enmore, the route between Marsfield and Turramurra, and the approaches to the new bridge over the Woronora River at Menai.

Similarly, road location studies and the fixing or revision of road boundaries was continued in the Newcastle and Wollongong-Port Kembla areas.

In the country, the location of 123 miles of road including 39 bridge sites was finalised. Investigations were initiated or were in progress for the location of a further 481 miles of road. Major projects included planning of sections of the Sydney-Newcastle Expressway, the South-Western Expressway, the Southern Expressway and the Federal Highway between the Hume Highway south of Goulburn and the A.C.T.

The location of State Highways around or through major towns and cities is one aspect of special significance being considered by the Department. Consideration is given to town planning and land use proposals, as well as future traffic desire lines and road engineering requirements. In some instances, it is apparent that the future route of the highway should pass around the urban area, with special access routes provided into it. In other cases, the highway could pass through the urban

area with grade-separated intersections to provide access to the local street system.

During 1970 a study was undertaken on "Rural Highway Development 1970 to 2000" for the purpose of preparing a plan for the development of State Highways in the rural areas of the State.

The study involved the estimation of traffic volume projections to the year 2000 on all rural highways, an analytical assessment of the present adequacy of the highways, section by section, and estimation of the date and extent of desirable improvements. Dual carriageways, for example, will be needed on 1,050 miles of highway by the year 2000. Other lengths will need reconstruction to higher standards or pavement widening. Some new routes are recommended for investigation.

The completed plan serves as a guide to the allocation of priorities for investigation and programming. Factors such as funds availability, physical condition of pavements and bridges, and community pressures will affect the actual order of construction, but do not detract from the value of the plan. The plan will be reviewed periodically in the light of actual traffic growth.

The Department's helicopter is used extensively for the field examination of road proposals and has proved to be invaluable in this aspect of the Department's work. During the year, over 92,000 replies were made to written enquiries regarding the effect of the Department's road proposals on property. This service was provided free of cost to the applicants.

LIBRARY SERVICE

The Department's 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. It is essentially a technical library relating to all aspects of highway engineering and associated subjects. For several years the library service has been operating on a punched card system.

In February, 1971, the Library's author catalogue was microfilmed by an officer of the National Library of Australia for the National Union Catalogue of Monographs. The Department is now able to use a service

which provides rapid location of books in libraries all over Australia.

During the year 2,098 books, pamphlets and standards were added to the library service, bringing the total holdings to 33,965 publications. Subscriptions were placed for an additional 13 periodical titles and this brought the total number of periodical titles received to 421.

The library circulated 14,192 new periodicals to the staff, lent 9,777 items from stock and issued four library bulletins during 1970-71.

PUBLIC RELATIONS

The Department, through the activities of the public relations service, aims to keep the community fully informed of its work by a variety of means. These include visual displays, incorporating both still and movie photographic records and scale models, special functions, such as official opening ceremonies and many forms of printed material.

In 1970, the Department produced a new 16 mm colour-sound film of 25 minutes duration entitled "The Road-builders". This film illustrates the modern roadbuilding techniques employed by the Department as well as the extent of the Department's activities.



The Department's exhibit at Sydney's 1971 Royal Easter Show.



Attractive lighted display units featured at the Department's Exhibit at Sydney's 1971 Royal Easter Show.

The Department's film library, consisting of 74 titles, issued films on loan, on a total of almost 500 occasions during the year. This included six occasions on which films were sent to Finland, Papua and New Guinea and Fiji, and almost 50 interstate loans.

During July, 1970, the model of the Gladesville Bridge complex was on loan to the Commonwealth Department of Trade and Industry for exhibition at the Industrial Trade Display in Wellington, New Zealand.

The Department's exhibit at Sydney's Royal Easter Show during April, 1971 drew large crowds interested in a new model on display for the first time. This model shows the Expressway System planned for Sydney and surrounding districts, as well as Highways and Main Roads. The surface of the model is made up of approximately 260 aerial photographs, glued onto a contoured base to provide authentic and detailed information of the area covered by the model.

Another model completed during the year shows, in detail, the section of the South Western Expressway which is now under construction between Cross Roads, near Liverpool and Maryfields, near Campbelltown. A permanent display of scale models, supported by photographic and cartographic illustrations is located on the Third Floor of the Department's Head Office. This display room is open to the public during office hours.

On 21st May, 1971 a ceremony was held on the site for the official opening to traffic of the new bridge over Lower Warrell Creek on a deviation of the Pacific Highway near Macksville. The new bridge and deviation forms another link in the improvement of the Pacific Highway, one of the State's major traffic arteries.

In 1971, the Department published a revised edition of the maps of "Sydney and Suburbs" and "Sydney and Surrounding Districts". These maps show, in addition to the Main Roads System, the routes of proposed expressways and those sections already constructed or under construction.

LEGISLATION

The Main Roads Act (Extended Leave) Amended Act, 1971 was assented to on 12th May, 1971. This Act amended the Main Roads Act, 1924, Section 7, to increase the period of extended leave to which the Commissioner, the Assistant Commissioner and officers of the Department of Main Roads shall be entitled.

AUSTRALIAN ROAD RESEARCH BOARD

NATIONAL ASSOCIATION OF AUSTRALIAN STATE ROAD AUTHORITIES

The Australian Road Research Board was established in 1960 by the National Association of Australian State Road Authorities. In 1965 it was registered as a public company, the members being the executive heads of the six State Road Authorities and the Commonwealth Department of Works. The Commissioner for Main Roads is a member of the Board representing New South Wales. An advisory council and various specialist committees assist in the operation of the research activities of the Board.

In addition to research carried out directly by the Board, work is sponsored at Universities and other institutions throughout Australia. Work continued during the year on Pavement Design, Traffic Flow Analysis, Transport Planning, Bituminous Materials and Analysis of Structural Materials for Roads and Bridges.

The Fifth Biennial Conference was held in Canberra during August, 1970. The Conference was opened by Mr. C. N. Barton, the Co-ordinator General of Works for Queensland and the guest speaker was Sir Ian McLellan of Broken Hill Pty. Ltd. In addition, Professor Smeed of the University of London addressed a combined meeting with the Institution of Engineers, Australia. Members of the staff of the Department of Main Roads, N.S.W., presented papers on subjects dealing with Photogrammetric Technology, Traffic Research, Materials Research and Road Construction.

Four regional symposia on compaction and stabilisation were held during the year, as a means of disseminating information about the research being conducted by the Board, particularly to Local Government Engineers. Two of these were held in New South Wales, in Wagga Wagga and Lismore.

The 17th Meeting of the Board was held in Canberra in August, 1970, the 18th in Melbourne in November, 1970 and the 19th in Melbourne in May, 1971. At the 19th Meeting, Mr. A. K. Johinke, Commissioner of Highways, S.A., was appointed Chairman and Mr. A. S. Reiher, Director-General, Commonwealth Department of Works, was re-appointed Deputy Chairman for the financial year 1971/72.

The 19th Meeting also approved the letting of a tender for the construction of the Board's permanent administrative headquarters and laboratory at Vermont, an outer suburb of Melbourne, and it is hoped to transfer its headquarters to this building in May or June, 1972.

The National Association of Australian State Road Authorities is an organisation of the central road authorities in the six States together with the Commonwealth Department of Works, which is the road constructing authority for the Commonwealth Territories.

The Association, established in 1934, serves to provide a means of pooling technical and administrative experiences; of inaugurating, co-ordinating and rationalising road research projects; of harmonising and co-ordinating standards; of ascertaining and publishing facts about Australia's principal roads and their financing; and of developing an informed outlook on Australia's road problems.

Several publications were issued during the year giving results of experiences and advising standards for adoption as opportunity permits.

Four meetings of the Association were held during the year and were attended by the head of the State Road Authorities of the six States and the head of the Commonwealth Department of Works. The Secretary of the Commonwealth Department of Shipping and Transport and the Chairman of the Commonwealth Bureau of Roads also attended sessions of these meetings.

The Principal Technical Committee comprising the senior technical officers of the several authorities and the Secretarial and Accounts Committee each met during the year and they were assisted by meetings of the several technical committees dealing with specialist activities. Representatives from the Commonwealth Department of Shipping and Transport, the Commonwealth Bureau of Roads, the Commonwealth Scientific and Industrial Research Organisation also attended a number of these meetings.

MISSIONS ABROAD

During September, 1970, Mr. B. J. Pearson, Assistant Designing Engineer for Bridges, and Mr. A. Tinni, Works Engineer, attended a Tunnel Symposium in Tokyo to obtain experience in tunnel design and construction, organised by the Japan Society of Civil Engineers. An inspection was also made of the major tunnel, bridge and roadworks in Japan.

While overseas in the latter part of 1970, the Commissioner for Main Roads, Mr. R. J. S. Thomas, attended the 6th World Meeting of the International Road Federation held at Montreal, Canada, in October, and performed the role of Vice-Chairman at the Key Session of "Roads and Environment".

In February, 1971, Mr. I. R. Shepherd, a Registered Surveyor, commenced a 12 month course leading to a Bachelor's Degree in Photogrammetric Engineering conducted by the International Institute for Aerial Survey of Earth Sciences at Delft, Holland. Delft University is regarded as the leading teaching establishment for Photogrammetry in the Western World.

ACKNOWLEDGEMENTS

In concluding this report of the activities of the Department of Main Roads for the financial year ended 30th June, 1971, I extend appreciation to the Hon. P. H. Morton, M.L.A., Minister for Local Government and Minister for Highways, for his consideration and support.

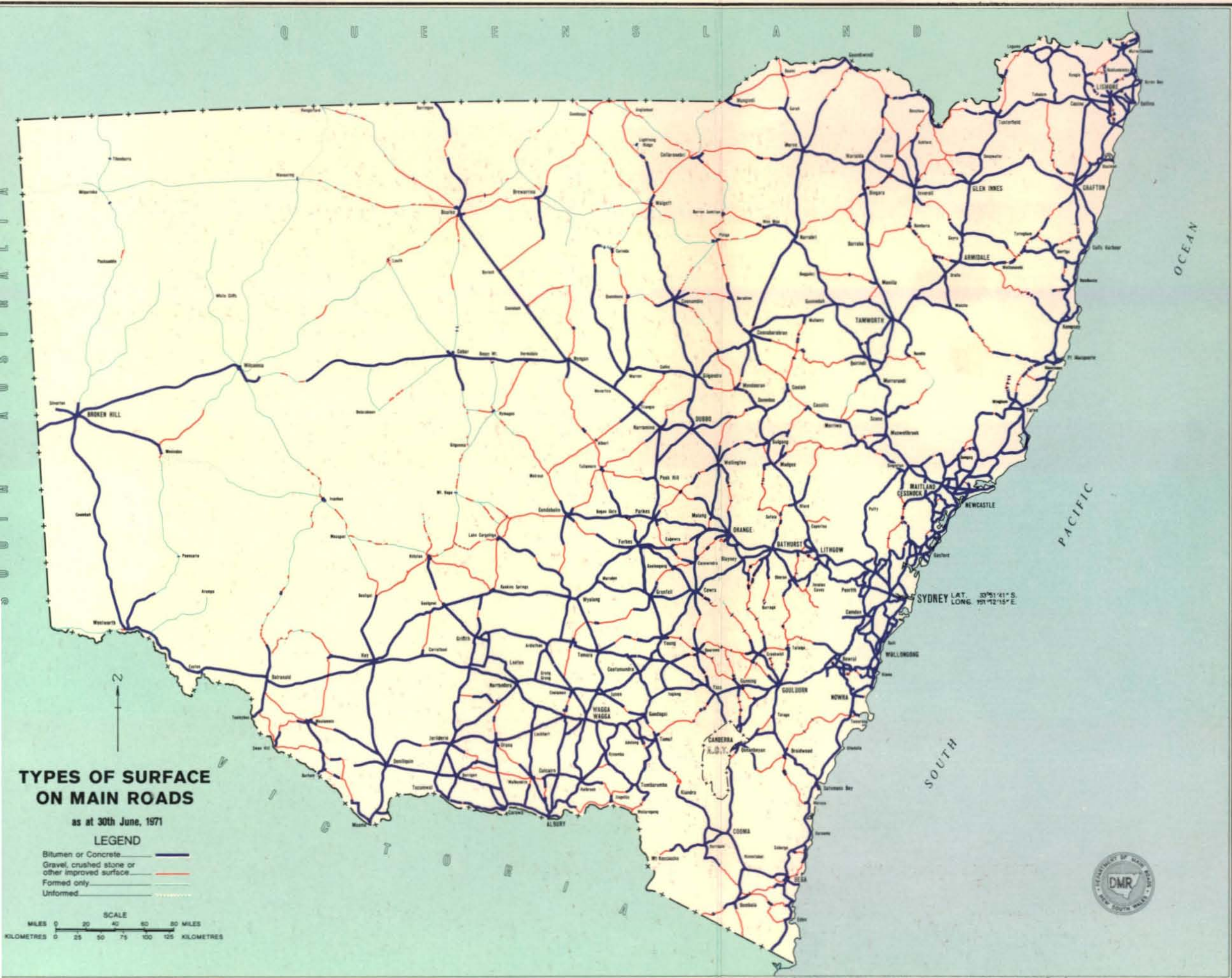
I wish to recognise the co-operation of Municipal and Shire Councils throughout the State. I desire also to record appreciation for the co-operation and assistance of Government Departments, State Instrumentalities, the Executive Committees of the Local Government and Shires Associations, and the Road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

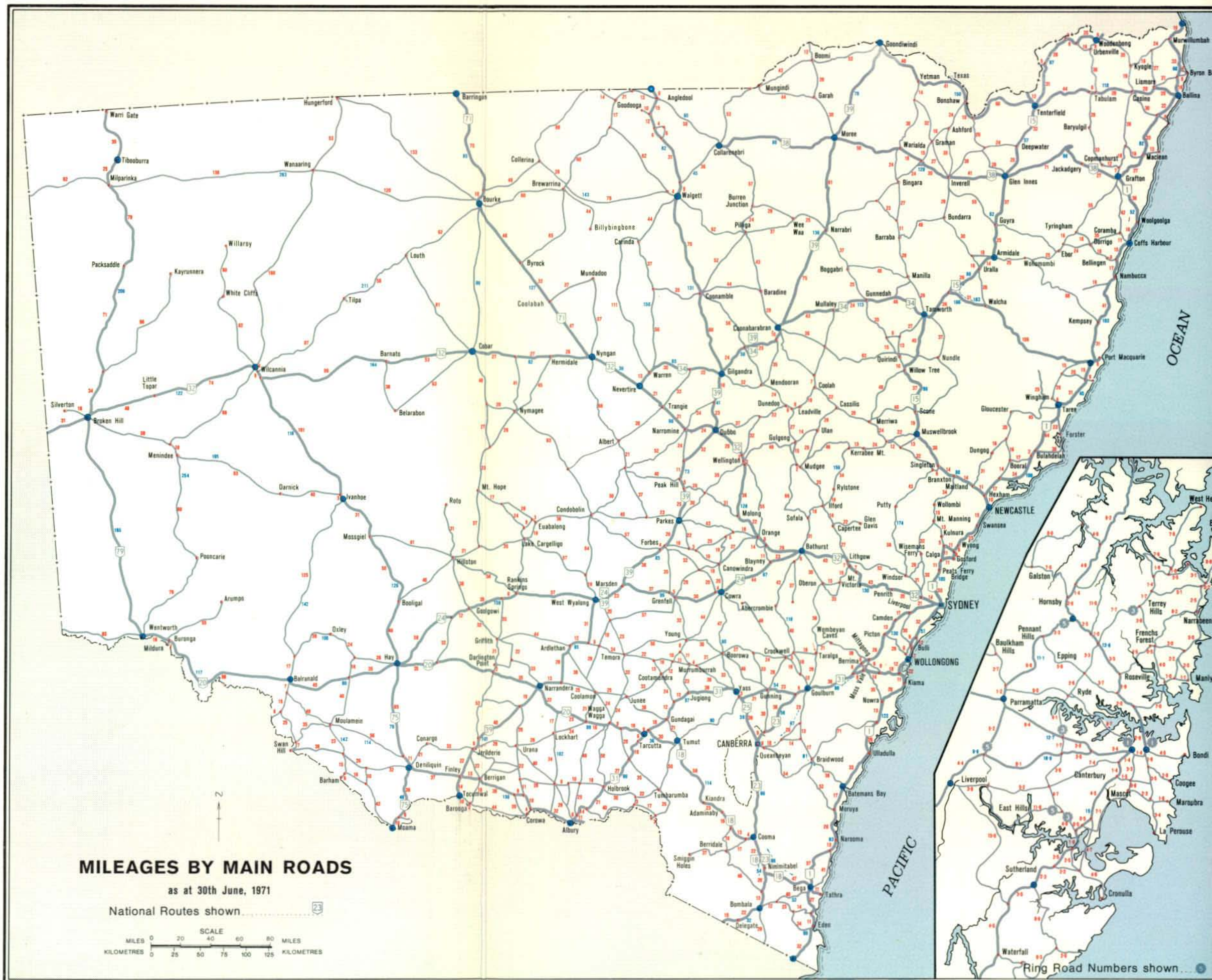
For their assistance in reporting the work being carried out by Councils and by the Department in improving the Main Roads of the State, I again thank the press, broadcasting and television organisations and other media throughout the State.

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. It would be ungenerous not to mention the retirement of several officers over the past year. It is now forty-six years since the Main Roads Board was established in 1925 and the stage has been reached whereat many dedicated officers and employees who have given their whole working life to the Service are retiring due to age limitations. To their efforts we all owe much both in actual work and inspiration for the future.

R. J. S. THOMAS
COMMISSIONER FOR MAIN ROADS

Q U E E N S L A N D







SUPPLEMENT

TO

REPORT

OF THE

COMMISSIONER FOR MAIN ROADS

FOR THE

Year ended 30th June, 1971

DEPARTMENT OF MAIN ROADS, NEW SOUTH WALES

SUPPLEMENT

to

FORTY-SIXTH ANNUAL REPORT

of the

COMMISSIONER FOR MAIN ROADS

Year ended 30th June, 1971

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DEPARTMENT OF MAIN ROADS

SENIOR OFFICERS

HEAD OFFICE

Engineer for Country Councils Work	B.H. BUTCHER
Highways Engineer	G.B. CRANNA
Road Design Engineer	L.R. DERRIN
Traffic Service Engineer	M.B. FAIRLIE
Field Inspecting Engineer	R. FITZHARDINGE
Mechanical Engineer	L.A.S. FLACK
Engineer for Programmes and Budgets	T.S. HOPE
Advance Planning Engineer	H. JAMES
Urban Investigations Engineer	E.R. JEFFERAY
Materials and Reserach Engineer	A. LEASK
Principal Surveyor and Property Officer	A.T. LENEHAN
Bridge Engineer (Design)	A.S. MIDDLEHURST
Executive Engineer	V.R.R. MINUS
Principal Architect	G.A. MCKENZIE
Engineer for Technical Training	J.A. NEESON
Rural Investigations Engineer	V.P. O'GRADY
Engineer for Standard Specifications and Technical Instructions	J.C. RUDD

Assistant Secretary (A)	C.A. GITTOES
Assistant Chief Accountant	E.L. MARLIN
Group Accountant (L)	N.D. MOLONEY
Assistant Secretary (P)	J.D. O'CONNELL
Group Accountant (E)	J. VALLENTINE

CLASSIFICATION OF ROADS

The mileage of proclaimed Main Roads (State Highways, Trunk Roads and Ordinary Main Roads) in the State at 30th June, 1971, totalled 22,381 miles.

The total mileage of Expressways, Main Roads (State Highways, Trunk Roads and Ordinary Main Roads), Secondary Roads, Tourist Roads, Developmental Roads and unclassified roads, for which the Department of Main Roads is responsible, was 27,060 miles.

Mileages of roads within the various classifications were:—

Expressways	27 miles *
State Highways.....	6,536 miles
Trunk Roads	4,332 miles
Ordinary Main Roads	11,513 miles
Secondary Roads	170 miles
Tourist Roads	243 miles
Developmental Roads	2,670 miles
Unclassified Roads	1,569 miles

* Excludes 3 miles of expressway standard road included in the total mileage of Ordinary Main Roads.

During the year one Trunk Road and three Ordinary Main Roads were proclaimed, two existing Ordinary Main Roads were extended, the proclamation of two Ordinary Main Roads were altered and one Ordinary Main Road was deproclaimed.

In addition, three roads were proclaimed as Tourist Roads, and two Developmental Roads were proclaimed. One Tourist Road and one Secondary Road were extended while another Secondary Road was altered.

During the year 15 Developmental Roads were deproclaimed or partly deproclaimed.

Details of these proclamations, deproclamations, extensions and alterations are listed in Appendices Nos. 8, 9, 10, 11, 11(A), 12 and 12(A).

The system of Main Roads at 30th June, 1971, and the boundaries of the Department's Divisions are shown on the map on the inside of the front cover of the Department's Annual Report.

COUNTY OF CUMBERLAND ROAD CONSTRUCTION

Details of road construction expenditure in the County of Cumberland in the past twelve months are listed in Appendices Nos. 3A, 4 and 4A.

The principal works undertaken in the County of Cumberland during the year were:—

State Highways

State Highway No. 1 — Prince's Highway

The Department is constructing the first stage of the Sutherland Bypass via Acacia Road, Kirrawee. Reconstruction has been completed between Oak Road and Auburn Street, Kirrawee.

A Major deviation is being constructed by the Department south of Farnell Avenue, Loftus, the deviation will include a new bridge over South Coast Railway line.

The Department has substantially completed reconstruction between Old Bush Road, Engadine, and Jennings Road, Heathcote. A major intersection is planned for the junction with Heathcote Road.

The Department has commenced construction of dual carriageways between Heathcote and Waterfall.

Work was commenced by the Department on construction of a passing lane for northbound traffic at the junction with Main Road No. 185 (Lawrence Hargrave Drive).

State Highway No. 2 — Hume Highway

Partial reconstruction and improvement to drainage were completed by the Department between Wetherill Street and Dickinson Avenue, Ashfield.

Failed sections of concrete pavement between Dickinson Avenue and Burwood Road were restored and the entire length sheeted with asphaltic concrete.

Construction was commenced on shoulders, associated drainage works, kerbing and guttering, medians and sheeting with asphaltic concrete between Roberts Road and Stacey Street, Bankstown.

Construction of the eastbound kerbside lane and associated drainage works were completed between Bigge Street and Old Sydney Road.

Reconstruction of the pavement was completed at the junction with Terminus Street (Main Road No. 578).

State Highway No. 5 — Great Western Highway

Failed sections of concrete pavement were restored between Wentworth Road and Smallwood Avenue, and Telopea Avenue and Haslams Creek, Flemington.

A drainage system was constructed by the Department between Haslams Creek and Day Street, Lidcombe.

The Department completed construction of the eastbound carriageway from Prospect Deviation to Beaconsfield Street, Mt. Druitt, between 22.0 miles and 23.5 miles from Sydney. Work is nearing completion on further extension of the dual carriageway to Glossop Street, St. Mary's 28.5 miles from Sydney.

The eastern extension of the four lane carriageway from Quarry Hill across Bound Creek is nearing completion between 29.9 miles and 30.1 miles from Sydney.

The Department completed reconstruction and interim channelisation of the eastern intersection with Henry Street East (Secondary Road No. 2082).

The Department commenced interim reconstruction of the intersection with Main Road No. 155 (Castlereagh and Mulgoa Roads).

ORDINARY MAIN ROADS

Main Road No. 139 — Beecroft Road

The Department completed approaches to the railway overbridge at Epping. This work included improvements and channelisation at the junction with Carlingford Road (Main Road No. 373) and reconstruction of the median in Epping Shopping Centre.

Main Road No. 154 — from the Hume Highway (State Highway No. 2) at Narellan, via Bringelly, Luddenham, Kingswood, Londonderry and Macquarie Street, Windsor to Main Road No. 184 at Forbes Street, Windsor

The Department commenced reconstruction between Kingshill Road and the Western Expressway near Penrith.

Channelisation of the intersection with Londonderry Road (Secondary Road No. 2063) and Cranebrook Road was completed during the year.

Main Road No. 156 — Castle Hill Road

Construction by Hornsby Shire Council was commenced on provision of a four lane carriageway between Pennant Hills Road (State Highway No. 13) and New Line Road, Pennant Hills.

Main Road No. 158 — Marsden Road

The Department completed widening of the carriageway to four lanes between Victoria Road (Main Road No. 165) and Stewart Street (Main Road No. 374).

Widening of Joseph Street and Leila Street was commenced by Council.

Main Road No. 227 – Kingsway

Sutherland Shire Council commenced construction of dual carriageways between Caringbah and Cronulla, part of which is in use although not yet complete.

Main Road No. 315 – Raw Square to the Boulevarde

Strathfield Municipal Council commenced construction of a deviation between Raw Square and The Boulevarde at Strathfield.

Main Road No. 328 – Warringah Road

Reconstruction and widening of Warringah Road were completed by the Department between Wakehurst Parkway (Main Road No. 397) and Allambie Road and reconstruction was commenced to Daines Parade, Beacon Hill.

Main Road No. 344 – Wentworth Avenue

The Department continued reconstruction of the dual carriageway between Bay Street and Corish Circle, Pagewood. Reconstruction and widening were completed between Baker Street and Corish Circle.

Main Road No. 373 – Carlingford Road and Epping Road

Hornsby Shire Council continued reconstruction between Midson and Ray Roads. This will complete reconstruction to four lanes between Pennant Hills Road (State Highway No. 13) and Main Road No. 139 Beecroft Road.

The Department completed construction of a dual carriageway between Shrimpton's Creek and Vimiera Road. Channelising of the intersections at Balaclava Road (Secondary Road No. 2024) and Herring Road were nearing completion and widening to four lanes was completed between Shrimpton's Creek and Lane Cove Road.

The Department completed reconstruction of the intersection with Moore Street, Lane Cove.

The Department completed restoration of a major slip at Cumberland Avenue, including construction of a retaining wall to prevent any further slips.

Main Road No. 393 – Lady Wakehurst Drive

The Department completed reconstruction to raise the road above flood level and improve the intersection with McKell Avenue.

Main Road No. 508 – Henry Lawson Drive

Hurstville Council commenced widening and reconstruction between Forest Road and Hymen Street including channelisation of the junction with Forest Road at Peakhurst.

Main Road No. 515 – Elizabeth Drive and Wallgrove Road

The Department commenced reconstruction of the intersection with Cowpastures Road.

The Department commenced reconstruction and widening between the Military Camp and The Horsley Drive. 0.7 miles has been completed.

Main Road No. 530 – Oliver Street

Warringah Shire Council is continuing work to provide four lane sealed pavement between Lawrence Street and Brighton Street, Curl Curl.

Main Road No. 534 – Cabramatta Road

Fairfield Municipal Council commenced construction of approaches to the new railway overbridge at Cabramatta.

Main Road No. 537 – Rooty Hill Road

Reconstruction by Blacktown Municipal Council continued between Penfold Street and Barker Street.

Main Road No. 599 – Eastern Valley Way

Reconstruction and widening were completed between Megalong Avenue and McClelland Street, Willoughby, and between Morotai Crescent and Sailors Bay Road, Northbridge. Work was proceeding to complete widening from Boundary Street, East Roseville, to Sailors Bay Road, Northbridge.

SECONDARY ROADS

Secondary Road No. 2018 – Old Canterbury Road and Secondary Road No. 2046 – Tebbutt Street

The Department commenced construction of approaches to a new bridge over Parramatta Road at Lewisham.

Secondary Road No. 2019 – High Street

North Sydney Council completed reconstruction from Broughton Street to High Street, Overbridge.

Main Road No. 159 – Sydney Road

Manly Council commenced widening of Sydney Road between Crescent Street and Belgrave Street, Fairlight.

Main Road No. 160 – Old Northern Road

Baulkham Hills Shire Council continued reconstruction and widening of Old Northern Road between Rogans Hill and Crego Road.

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

The Department continued construction of a six lane dual carriageway between Fontenoy Road and Waterloo Road, North Ryde and commenced an interim four lane carriageway between Waterloo Road and Epping Road, North Ryde.

Reconstruction of Ryde Road was continued between Shaddock Avenue and Minnamurra Avenue, Pymble and some clearing was carried out between Minnamurra Avenue and West Street, Pymble.

Main Road No. 164 – Military Road, Spit Road, Pittwater Road and Barrenjoey Road

The Department commenced reconstruction and widening of Military Road between Spofforth Street and Spit Junction, and of Spit Road between Spit Junction and Punch Street in the Municipality of Mosman.

Reconstruction of Pittwater Road between Namona Street and Jacksons Road, North Narrabeen, was substantially completed as was Barrenjoey Road between Darley Street and Polo Avenue, Mona Vale.

Reconstruction of Barrenjoey Road was in progress between Grandview Parade and Bardo Road, Newport.

Main Road No. 165 – Victoria Road

The Department commenced construction of a six lane divided carriageway between Pemberton Street and Elizabeth Street, Parramatta.

The Department continued replacement of failed concrete slabs between Monash Road and Pittwater Road, Gladesville.

Main Road No. 166 – Centennial Avenue

Reconstruction by the Department of Centennial Avenue was completed between Barwon Road and Epping Road (Main Road No. 373) at Lane Cove.

Main Road No. 167 – Stanmore Road and New Canterbury Road

Marrickville Council completed reconstruction of deteriorated concrete pavement and sheeting with asphaltic concrete between Enmore Road and Crystal Street, Petersham.

Main Road No. 170 – Regent Street and Botany Road

The Department continued reconstruction of Botany Road between Beauchamp Road and Bunnerong Road (Main Road No. 171), Banksmeadow

Main Road No. 173 – Hopetoun Avenue

Woollahra Council completed reconstruction of the western road shoulder northerly from Sassafras Lane, Watsons Bay.

Main Road No. 174 – Pittwater Road

Warringah Shire Council commenced work on the first stage of reconstruction and widening of Pittwater Road between Mona Vale and Church Point.

Main Road No. 184 – Bell's Line of Road

The Department completed construction of a six lane divided carriageway between By Street and North Rocks Road. This work included improvement and channelising at the intersection with North Rocks Road.

The Department continued construction of a six lane divided carriageway in Macquarie Street through the town of Windsor between Bridge Street and Forbes Street.

The Department completed widening of a reverse curve at North Kurrajong.

The Department substantially completed widening on Mt. Tomah between 28.7 miles and 29.8 miles west of Windsor.

Near Bell, the Department continued strengthening and widening between 40.3 miles and 41.5 miles west of Windsor. The work makes provision for additional lanes for slow-moving vehicles at several locations and forms part of the section between 36 miles and 41.5 miles to be similarly treated.

Main Road No. 190 – St. Hilliers Road and Joseph Street

Auburn Municipal Council completed widening of St. Hilliers Road, Auburn, between State Highway No. 5 and Boorea Street.

Secondary Road No. 2033 — Ryde Road

Hunter's Hill Council completed reconstruction of the intersection with Pittwater Road (Secondary Road No. 2052).

Secondary Road No. 2043 — Junction Road

Ku-ring-gai Council continued reconstruction and widening.

Work between Grosvenor Street and Coonanbarra Road, Wahroonga, was completed. Minor widening was carried out on a section of Horace Street near St. Ives South Public School.

Secondary Road No. 2057 — Arthur Street

Strathfield Municipal Council completed reconstruction and widening between Henly Road and Richmond Road.

Secondary Road No. 2060 — Punchbowl Road

Canterbury Council completed reconstruction and widening to four lanes between King George's Road (Main Road No. 315) and Punchbowl Station.

Secondary Road No. 2068 — The River Road

Bankstown Municipal Council continued reconstruction and widening between the Railway Underpass and Tower Street, Revesby.

Secondary Road No. 2070 — River Road West, Bridge Street, Penrose Street

Reconstruction and widening between Bridge Street and Wangalla Road, Riverview, were completed by Lane Cove Municipal Council.

Secondary Road No. 2074 — Anzac Parade

Randwick Municipal Council commenced reconstruction and provision of dual carriageways from Nyan Street to Jennifer Street, Little Bay.

Secondary Road No. 2080 — The Grand Parade

Rockdale Municipal Council completed construction of the eastern kerbside lane from Ramsgate Road to Sandringham Street, Ramsgate.

Roads Other Than Main Roads*Country Road No. 5016 — Alford's Point Road*

The Department completed earthworks on the immediate approaches to the proposed bridge over Georges River at Alford's Point to allow the contractor to commence construction of the bridge.

Country Road No. 5011 and Country Road No. 5058 — Marsh Street

The Department proceeded with construction of a new access road between the Overseas Terminal at Sydney (Kingsford Smith) Airport and West Botany Street at Marsh Street and General Holmes Drive at Tancred Avenue.

X4 — The Western Expressway

Work was commenced by the Department on the western approach to Regentville Bridge including the link to the Great Western Highway by Russell Street, Emu Plains.

X6 — The Southern Expressway

Construction work was continued by the Department between Five Islands Road and Northcliffe Drive, Port Kembla.

COUNTRY ROAD CONSTRUCTION

Details of country road construction expenditure in the past twelve months are listed in Appendices Nos. 3B, 3C, 5 and 5A.

The principal construction works undertaken during the year were:—

State Highways*State Highway No. 1 — Prince's Highway*

Wollongong City Council recommenced reconstruction on improved alignment and pavement widening to 42 feet between kerbs, between Sturdee Avenue and Hobart Street, Bulli. Council also completed (by Contract) construction of retaining walls at Black Cutting Hill, north of Rothery Street, Bellambi.

The Department commenced construction of approaches to a new bridge at Macquarie Rivulet including improvement to the junction with Illawarra Highway (State Highway No. 25).

Reconstruction by the Department of a short length of pavement on improved alignment, including provision of a short climbing lane, was completed south of the turnoff to Toolijoa.

The Department completed reconstruction of approaches to the bridge at Abernethy's Creek between 97.0 miles and 97.5 miles south of Sydney on improved alignment and grading and also completed construction of a climbing lane for northbound traffic on Morton's Hill, north of the junction with Main Road No. 293.

A final seal was applied to the pavement and shoulder widening work between 1.7 miles north and 0.6 miles south of Narooma including improvement to alignment and grading between the water tower and Cemetery Road.

Work commenced on Quaama Deviation between 31.2 and 32.6 miles south of Narooma. Clearing was completed and work on the culverts was in progress. When completed this deviation will provide a graded by-pass of Quaama as well as approaches to the new bridge over Dry River.

A final seal was applied to work carried out in Carp Street, Bega, which involved reconstruction of the pavement and lowering of the previous high crown.

Work continued, until the February flood, on construction of Kiah deviation which extends from 4.9 miles south of Eden at the Boydtown turnoff to the Towamba River Bridge at Kiah, 8.2 miles south of Eden. Earthworks were completed and a short section was opened to traffic. The deviation will eliminate three miles of narrow winding road.

A final seal was applied by the Department to the pavement widening at the junction with Edrom Road - the major road of access to the Wood Chip Factory on Two-Fold Bay. The work provides additional lanes to facilitate turning movements by heavy timber traffic.

State Highway No. 2 - Hume Highway

The Department commenced reconstruction to provide dual carriageways (four lanes) from the southern end of the proposed Camden deviation to the Camden/Wollondilly Shire Boundary between 40.0 and 40.8 miles south of Sydney.

Work was continued by the Department to widen the pavement on improved alignment (including provision of climbing lanes) on Razorback Range. Reconstruction has been completed over a length of about 4.8 miles between Menangle turnoff and Apps Creek.

The Department completed widening of the pavement and formation, including the extension of a two cell 8 ft. x 4 ft. reinforced concrete box culvert at Antill Street, Picton.

Reconstruction was commenced by the Department on improved alignment in the vicinity of Yarran Road, Bargo.

The Department commenced reconstruction on improved alignment and grading over Comfort Hill between 92.0 and 93.4 miles south of Sydney and completed construction of approaches to a new bridge over Black Bob's Creek between 93.4 and 94 miles south of Sydney.

Construction of a second carriageway for southbound traffic was completed and is in use between 2.9 and 6.1 miles north of Goulburn.

Goulburn City Council completed reconstruction and channelisation between 0.5 and 0.9 miles south of Goulburn.

Earthworks operations for construction of dual carriageways between 2.3 and 7.3 miles south of Goulburn were in progress. This work includes duplication of two bridges, which are well advanced, and provision of two separate structures over the Main Southern Railway Line.

Construction of a grade separated intersection between 7.3 and 9.0 miles south of Goulburn was continued at the junction with the Federal Highway. Work was well advanced on all lanes as well as the overpass bridge, with two new lanes in operation under primer seal.

Between 0.1 and 1.2 miles south of Gunning, Gunning Shire Council completed drainage works in association with approaches to the new bridge over Meadow Creek, in the town of Gunning.

Construction was commenced of a deviation with dual carriageways around the village of Bowning, between 7.4 and 10.5 miles west of Yass. The deviation will avoid the poor alignment and grading and a narrow bridge in the village, and will entail provision of twin bridges over Bowning Creek. The work will be proclaimed a motorway and access along the route will be restricted.

Reconstruction and bituminous surfacing were completed between 53.1 and 55.2 miles south of Yass. The work included approaches to a new bridge over Daisy Bed Creek.

Reconstruction was commenced between 16.8 and 18.0 miles south of Holbrook. This work is being carried out as an extension to Sweetwater Creek Bridge approaches (16.4 to 16.8 miles south of Holbrook).

Reconstruction was continued between 30.7 and 33.4 miles south of Holbrook (Table Top to Eight Mile Creek). The work will provide dual carriageways.

State Highway No. 4 - Snowy Mountains Highway

Reconstruction and realignment were completed, except for the final seal, between 8.1 and 9.4 miles west of Tathra in conjunction with construction of Parbery Creek Bridge and the culvert over Warragaburra Creek.

On Brown Mountain Deviation, between Bega and Nimmitabel, the cutting at 38 miles from Bega was laid back for stability of the batter, involving 15,000 cu. yds. of earthworks. 2.2 miles of bituminous surfacing remain to be completed.

Clearing was commenced between 8.4 and 13.0 miles west of Kiandra and drainage work was commenced between 8.4 and 10.6 miles west. A bituminous seal was provided to 6.9 miles west of Kiandra including approaches to Bullock Head Creek Bridge.

Construction was continued between 13.0 and 30.7 miles west of Kiandra. Traffic was using the completed formation for a distance of 10.8 miles from Yarrangobilly to Inspiration Point. This section has been provided with a dust-free primed surface for a distance of 1.8 miles.

State Highway No. 5 – Great Western Highway

The Department substantially completed the new junction with Trunk Road No. 55, 5 miles west of Lithgow, including grade-separated conditions and dual carriageways. Work continued eastwards of the junction on approaches to the bridge under construction to replace the nearby narrow railway overbridge at Marrangaroo.

At Yetholme, the Department completed construction of a deviation between 24.4 and 27.7 miles west of Lithgow.

The Department commenced work on construction of a deviation at Kirkconnell, between 21.6 and 24.4 miles west of Lithgow.

State Highway No. 6 – Mid-Western Highway

The Department completed reconstruction west of Blayney on Red Hill between 0.8 miles and 3.9 miles and construction was in progress between 3.9 and 6.0 miles west of Blayney. Foamed bitumen reseal was completed between 18.7 and 19.5 miles west of Blayney. Reconstruction was completed between 21.0 and 22.0 miles west of Blayney.

State Highway No. 7 – Mitchell Highway

The Department commenced work between 32.1 and 26.7 miles west of Bathurst and completed reconstruction between 30.7 and 31.7 miles west.

Reconstruction and pavement widening were commenced between 13.4 and 18.7 miles west of Wellington and was substantially completed between 20.0 and 24.4 miles west.

Construction was in progress of approaches to Willandra Creek Bridge between 6.0 and 8.0 miles west of Dubbo.

Construction of a turning lane at Dubbo Airport and provision for speed change lanes at West Dubbo Drive-In Theatre were completed.

The Department completed reconstruction of the 22 feet wide bituminous surface between 36 and 41.2 miles north of Bourke.

Reconstruction preparatory to bituminous surfacing was in progress between 41.2 and 59.0 miles north of Bourke.

State Highway No. 8 – Barrier Highway

Reconstruction and widening to 22 feet were commenced between 1.0 and 4.0 miles east of Cobar and were completed between 98.0 and 111.4 miles west of Cobar.

Construction was well advanced on McCulloch's Range Deviation between 22.0 and 51.0 miles east of Wilcannia with the first of two coat final seal being applied between 20.2 and 22.0 miles east of Wilcannia.

A final bituminous seal was applied across Darling River Flood Plain between 0.3 and 8.2 miles east of Wilcannia and a second seal coat was applied to the floodways prior to the flooding of the Darling River in March, 1971.

State Highway No. 9 – New England Highway

Work was completed on construction of a deviation 3.29 miles long extending from Tarro overbridge, 1.5 miles west of Hexham Bridge to Thornton Road junction, west of Beresfield. Dual carriageways now extend from Maud Street (Main Road No. 605), Mayfield to Thornton Road junction, a distance of 9.4 miles.

Reconstruction was commenced from Long Bridge 0.9 miles west of Maitland, to Tally Ho Park 3.3 miles west of Maitland. The work currently being undertaken is between Bonner Street and Verge Street, Rutherford and incorporates construction of approaches to the concrete replacement railway overbridge at Rutherford.

Reconstruction was completed between 3.5 and 5.0 miles west of Maitland.

A narrow winding section of bituminous pavement was eliminated between 19.1 and 21.1 miles west of Maitland near Belford.

Construction of a climbing lane 1 mile long was commenced on McDougal's Hill 2 miles west of Singleton.

Reconstruction was completed between 29.0 and 30.3 miles north of Murrurundi to prime seal stage to provide a 24 feet wide pavement.

Reconstruction to provide a 24 feet wide pavement was commenced between 41.1 and 44.0 miles north of Murrurundi with earthworks and gravelling well in hand.

Tamworth City Council commenced reconstruction of the southern approach to the City, along Goonoo Goonoo Road, between Scott Road and Kent Street (55.74 miles to 56.26 miles north of Murrurundi). Reconstruction will provide two three lane carriageways separated by a wide median with separate lanes for right-turning traffic at side streets. The western carriageway was completed except for final sealing.

Reconstruction and bitumen surfacing 22 feet wide was completed between 48.1 and 50.1 miles north of Tamworth with exception of the final seal on part of the work.

State Highway No. 12 – Gwydir Highway

Macintyre Shire Council commenced reconstruction and widening between 5.1 and 6.6 miles west of Inverell.

Yallaroi Shire Council completed reconstruction and widening between 4.6 and 6.0 miles east of Warialda.

Boomi Shire Council continued construction of approaches to bridges over Cowbail Creek from 28.0 to 29.0 miles west of Moree and Brown's Creek No. 1 and Brown's Creek No. 2, from 32.1 to 33.4 miles west of Moree.

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

Work was completed by the Department on approaches and interchange at the new railway overbridge at Villawood.

Feature crib block retaining walls were constructed by the Department at Dog Trap Railway Underpass.

Work by the Department was commenced on construction of kerbside lanes between Tintern Avenue and Bettington Road, Carlingford, to provide a four lane carriageway.

Work was completed by the Department on construction of kerbside lanes between Carlingford Road and Murray Farm Road, Carlingford, to provide a four lane carriageway.

State Highway No. 14 – Sturt Highway

Construction was continued on Guy's Hill deviation between 13.8 and 17.4 miles west of State Highway No. 2. The section from 13.8 to 14.6 miles was provided with a primed surface and opened to traffic. The section from 14.6 to 17.4 miles west was nearing completion.

Work was commenced on reconstruction and bituminous surfacing between 25.4 and 28.3 miles west of Wagga Wagga.

Preliminary work was commenced on reconstruction and bituminous surfacing between 12.0 and 19.2 miles and between 50.6 and 71.5 miles west of Hay.

Reconstruction and widening of the formation were completed between 19.2 and 21.9 miles and between 22.0 and 27.8 miles west of Hay.

Work was commenced on widening the formation and pavement between 41.1 and 45.6 miles east of Euston. A 24 feet wide bituminous pavement will be provided.

Work on reconstruction to improve sight distance and to widen the formation and pavement was completed between 12.6 and 13.9 miles east of Euston. A final bituminous surface of 24 feet width was provided.

State Highway No. 15 – Barton Highway

Reconstruction and bituminous surfacing were completed between 7.2 and 9.2 miles south of Yass.

Reconstruction and widening were completed between 23.0 and 24.5 miles south of Yass

State Highway No. 16 – Bruxner Highway

Reconstruction prior to bituminous surfacing was continued by Gundurimba Shire Council between 1.72 and 2.75 miles west of Lismore. This work will eliminate a section of narrow pavement on poor alignment. Gundurimba Shire Council also commenced construction of approaches to Loftville Creek Bridge between 2.75 and 3.5 miles west of Lismore.

Construction continued between Tabulam and Drake to improve alignment and provide a bituminous surface over the entire length. The section between 77.0 and 82.9 miles west of Ballina was completed and opened to traffic.

The section between 82.9 and 86.3 miles west of Ballina will be opened to traffic when the bridge over Ti-Tree Creek is completed.

Tenterfield Shire Council completed reconstruction between 31.6 and 32.6 miles east of Tenterfield at Drake.

Tenterfield Shire Council continued reconstruction and widening between 23.0 and 29.0 miles west of Tenterfield.

Reconstruction and widening between 29.0 and 30.0 miles west of Tenterfield were commenced by Tenterfield Shire Council.

The Department commenced preliminary works for reconstruction and widening between 14.0 and 20.0 miles east of Bonshaw.

The Department continued bridgeworks to complete reconstruction and bituminous surfacing between 8.0 and 14.0 miles east of Bonshaw.

The Department continued reconstruction and bituminous surfacing between 5.0 and 17.9 miles west of Bonshaw.

Ashford Shire Council continued construction of approaches to Brown's Creek Bridge between 27.4 and 28.0 miles west of Bonshaw and construction of approaches to Middle Creek Bridge between 31.0 and 32.0 miles west of Bonshaw.

Ashford Shire Council completed reconstruction and bituminous surfacing between 32.0 and 37.0 miles west of Bonshaw.

Yallaroi Shire Council commenced reconstruction and bituminous surfacing between 11.4 and 14.0 miles west of Yetman.

State Highway No. 17 – Newell Highway

The Department proceeded with reconstruction and bituminous surfacing from Whalan Creek, 60.5 miles north of Moree to Boggabilla, 72.0 miles north of Moree.

Reconstruction and bituminous surfacing were commenced between 47.0 and 54.0 miles north of Moree.

The Department continued reconstruction and widening between 43.0 and 47.0 miles north of Moree.

The Department has completed final bituminous surfacing to 62.4 miles south of Narrabri and priming to 69.2 miles south of Narrabri with further reconstruction work in hand to 71.0 miles south of Narrabri.

Earthworks were commenced on reconstruction of the intersection with State Highway No. 11 involving 0.75 miles of reconstruction on State Highway No. 17 and 1.0 mile on State Highway No. 11. A three cell 8 ft. x 8 ft. reinforced concrete box culvert 64 feet long will be provided on State Highway No. 11 at Dog Trap Gully.

The elimination of a causeway was completed at Alectown, 14.8 miles north of Parkes.

Widening of the pavement, including culverts, from Parkes to Peak Hill was in progress and widening of the existing 18 feet wide pavement to 22 feet was commenced between 9.5 and 20.0 miles north of Forbes.

Widening and bituminous surfacing were commenced between 10.1 and 11.8 miles north of Jerilderie.

State Highway No. 18 – Castlereagh Highway

Widening and bituminous surfacing were commenced between 0.2 and 2.1 miles north of Gilgandra.

The Department completed reconstruction and bituminous surfacing to 22 feet from 33.0 to 36.0 miles north of Walgett. Reconstruction preparatory to bituminous surfacing was in progress from 36.0 to 44.0 miles north of Walgett.

State Highway No. 19 – Monaro Highway

The Department completed reconstruction north of Michelago Creek Bridge approaches between 30.2 and 31.2 miles south of Canberra. This section and approaches to Michelago Bridge were provided with a bituminous surface.

A bituminous surface has been provided between 46.0 and 46.3 miles south of Canberra (approaches to bridge over Gungahandra Creek), and between 57.5 and 58.0 miles south of Canberra at Driscoll's Hill.

Cooma Municipal Council sealed approaches to the railway overbridge at Cooma on behalf of the Department. The only work remaining is the laying of asphaltic concrete on the bridge deck.

Reconstruction was continued between 2.0 and 6.0 miles south of Cooma where 1.1 miles were primed and drainage works were substantially completed. Another mile was completed to gravel stage.

A section was completed between 7.5 and 10.0 miles south of Nimmitabel.

On behalf of the Department, Bibbenluke Shire Council completed reconstruction and bituminous sealing between 8.0 and 10.0 miles south of Bombala. Earthworks were commenced between 0.0 and 0.8 miles south of the Bombala Municipal Boundary, including the junction with Trunk Road No. 93.

State Highway No. 20 – Riverina Highway

Reconstruction and bituminous sealing between 4.9 and 6.4 miles west of Berrigan were carried out to final gravelling stage and the section from 2.7 to 4.9 miles was primed and partly sealed.

Work was commenced by Deniliquin Municipal Council on reconstruction, realignment and widening between 3.0 and 5.6 miles east of Deniliquin.

State Highway No. 21 – Cobb Highway

Final sealing work was completed on the reconstructed section between 4.7 and 8.2 miles north of Moama.

The reconstruction, bituminous surfacing and channelisation of the intersection with State Highway No. 20 and Main Road No. 552 at Deniliquin were completed by Deniliquin Municipal Council on behalf of the Department.

State Highway No. 22 – Silver City Highway

A final bituminous surface was applied to sections between 4.2 and 4.7, between 5.3 and 5.4 and between 7.1 and 7.2 miles east of Wentworth.

Between Wentworth and Broken Hill a final bituminous surface was applied to the existing bitumen sand seal between 1.0 and 4.0 miles north of Wentworth. This length includes approaches to the bridge over Two Mile Break. Further final bituminous seals were applied between 6.1 and 9.7 and between 39.3 and 41.0 miles north of Wentworth. A final bituminous surface now extends between Wentworth and Broken Hill except for the short length between 4.0 and 6.1 miles north of Wentworth comprising approaches to Four Mile Break and Tinch Creek. Completion of construction of these approaches is in abeyance pending construction of bridges at these sites and in the meantime traffic is using a bitumen sand primer/sealed side-track.

Earthworks were nearing completion between 50.1 and 53.2 miles north of Tamworth. The work was gravelled and primed to 51.5 miles and gravelling was proceeding on the remaining length.

Armidale City Council constructed an improved intersection with Main Road No. 124, 1.0 mile south of Armidale. Channelisation of the intersection was also provided.

The Department completed construction of a deviation between 1.0 mile and 6.5 miles north of Guyra.

Work was commenced on construction of a climbing lane at Ben Lomond Range between 16.8 and 17.5 miles south of Glen Innes.

State Highway No. 10 – Pacific Highway

Construction of dual carriageways to eliminate a narrow winding section between Burns Road and Ourimbah Creek between 7.8 and 8.8 miles north of Gosford, is nearing completion.

Reconstruction was completed to provide dual carriageways between Robert Street and Ada Street, Belmont, between 13.7 and 12.8 miles south of Newcastle including approaches to Cold Tea Creek Bridge.

Work was completed on construction of dual carriageways between Ida Street, Charlestown, and Newcastle City Boundary, a distance of 1.1 miles.

Dual carriageways now extend for a distance of 8.3 miles from Newcastle City Boundary to Cold Tea Creek Bridge at Belmont South with the exception of 2.4 miles between Oakdale Road, Gateshead and Main Road No. 325 at Charlestown where three lanes are available for traffic.

Widening of the formation to 44 feet including extension of culverts, was continued between North Arm Cove and Bulahdelah to provide 10 feet wide shoulders for a distance of 22.4 miles. Approximately 12 miles of this work has now been completed.

Work was completed on regrading of a crest and provision of a climbing lane 1 mile north of Bulahdelah.

Construction of a climbing lane including widening of the existing pavement to a 44 feet formation with 24 feet sealed pavement was commenced between 2.8 and 4.1 miles north of Bulahdelah.

Reconstruction and strengthening to provide 24 feet wide sealed pavement and 10 feet wide shoulders were completed in the Coolongolook area between 15.5 and 19.0 miles north of Bulahdelah.

Kempsey Municipal Council completed reconstruction, with provision of medians and traffic islands, at the intersection with Belgrave Street (Trunk Road No. 75), Kempsey.

In the Nambucca Shire, the Department completed a deviation 1.75 miles long on the approaches to a new bridge over Lower Warrell Creek approximately 2 miles south of Macksville. This work is an extension of an existing motorway and has eliminated a section of road at Hunt's flat which is subject to flooding.

A deviation between 3.1 and 4.8 miles north of Coffs Harbour was opened to traffic. This deviation replaced a section of narrow pavement on substandard alignment.

Reconstruction prior to bituminous surfacing was commenced between 4.8 and 6.2 miles north of Coffs Harbour.

Construction of a deviation was completed between 47.1 and 50.1 miles north of Grafton. This work included construction of a bridge at 49.5 miles and eliminated a section where blockages due to flooding frequently occurred.

Widening prior to strengthening and sealing commenced between 6.0 and 7.0 miles north of Ballina.

Construction of a climbing lane continued between 1.2 and 2.7 miles north of Brunswick Heads. The section for southbound traffic was completed between 2.1 and 2.7 miles.

Construction of a climbing lane continued on Burringbar Range. The climbing lane has been completed between 6.2 and 7.65 miles south of Murwillumbah. Work is continuing on the remaining lengths between 4.7 and 6.2 miles and between 7.65 and 8.5 miles.

Reconstruction and bituminous surfacing were completed from Alma Street to Condong Creek, between 0.0 and 0.7 miles north of Murwillumbah. This work improved a section of narrow pavement.

Tweed Shire Council in conjunction with the Department continued reconstruction between Boyd's Bay Bridge and the Queensland Border. Construction has now been completed between 18.2 miles north of Murwillumbah and the Queensland border.

State Highway No. 11 – Oxley Highway.

The Department completed four miles of reconstruction in Hastings Shire. The work extends the continuous dustless surface to 42.5 miles west of Port Macquarie.

Reconstruction has been completed to extend the bituminous surface to 22.0 miles east of Walcha, with a break between 13.5 and 17.0 miles where approaches to a new bridge over Stony Creek were nearing completion.

Peel Shire Council commenced work between 16.8 and 18.5 miles west of Tamworth to replace the old 18 feet wide bituminous pavement with a 22 feet wide pavement.

Work was commenced on reconstruction by Liverpool Plains Shire Council between 4.3 and 7.25 miles west of Gunnedah. This section, known locally as "Hobson's Bend", has a bad accident record.

Reconstruction preparatory to bituminous sealing was in progress from 4.2 to 8.0 miles north of Nevertire and reconstruction and widening to 22 feet were completed between 1.3 and 4.2 miles north of Nevertire.

Within the City of Broken Hill a final bituminous surface over a length of one mile was applied by the Broken Hill City Council on the approaches to the new railway (South Road) over-bridge which was constructed in connection with the standardisation of rail gauge. Road furnishings on the approaches were being erected by the Broken Hill City Council and this work was substantially completed.

State Highway No. 24 — Mt. Lindesay Highway

Reconstruction and bituminous surfacing were commenced between 3.6 and 4.2 miles from Woodenbong by Kyogle Shire Council.

State Highway No. 25 — Illawarra Highway

The Department completed reconstruction and pavement widening between 5.0 and 7.0 miles east of Moss Vale, including improvement to the intersection with Main Road No. 265.

Work under construction by the Department to improve alignment and provide a climbing lane for heavy traffic on Macquarie Pass between 11.1 and 11.6 miles west of Prince's Highway was severely damaged by flood rains in February, 1971, and this damage was still to be completely repaired.

Trunk Roads

Trunk Road No. 54 — Goulburn — Ilford

Goulburn City Council completed reconstruction and bituminous surfacing between 0.8 and 1.5 miles north of Goulburn.

Abercrombie Shire Council completed reconstruction and bituminous surfacing between 19.4 and 23.8 miles south of Bathurst.

Turon Shire Council continued reconstruction and bituminous surfacing, to running coarse gravel stage, between 25.8 and 27.5 miles north of Bathurst.

Rylstone Shire Council completed reconstruction and bituminous surfacing to 4.5 miles south of Ilford and commenced work on reconstruction and bituminous surfacing between 4.5 and 5.5 miles south of Ilford.

Trunk Road No. 55 — Marrangaroo — Mullaley

Near Cullen Bullen, the Department continued reconstruction and widening between 15.7 and 19.6 miles north of Lithgow.

Coolah Shire Council commenced reconstruction and bituminous surfacing between 6.3 and 7.0 miles north of Coolah including relocation of the intersection with Main Road No. 396.

Reconstruction by Liverpool Plains Shire Council was well in hand from 11.4 to 13.9 miles south of Mullaley. The new formation was opened to traffic with base coarse gravelling completed.

Trunk Road No. 56 — Forbes — Hume Highway near Yass

Boorowa Shire Council continued reconstruction north of Boorowa, completing the section between 18.3 and 22.0 miles preparatory to bituminous surfacing.

Goodradigbee Shire Council completed reconstruction and bituminous sealing between 15.2 and 17.2 miles north of Yass and completed final gravelling between 14.6 and 15.2 miles north of Yass.

Trunk Road No. 57 — Nyngan — Old Junee

Lachlan Shire Council completed reconstruction and bituminous surfacing between 16.9 and 20.0 miles south of Condoblin and commenced work between 20.0 and 22.0 miles south.

Trunk Road No. 61 — Orange — Cobar

Cobar Shire Council continued reconstruction preparatory to bituminous surfacing between 26.0 and 36.0 miles south of Cobar.

Trunk Road No. 62 — Scone — Coolah

Scone Shire Council completed reconstruction and bituminous sealing between 21.7 and 23.1 miles west of Scone.

In Merriwa Shire the bituminous seal was extended to 19.7 miles west of Merriwa and similar work was in progress further westward to 21.8 miles.

Trunk Road No. 63 — Tamworth — Yetman

Reconstruction and widening were completed by Cockburn Shire Council between 14.0 and 15.25 miles north of Tamworth to provide a 22 feet wide bituminous pavement.

Yallaroi Shire Council commenced widening and strengthening between 11.85 and 12.95 miles south of Warialda.

Ashford Shire Council has completed to primed stage reconstruction and bituminous surfacing between 13.68 and 14.4 miles south of Yetman.

Trunk Road No. 65 — Ewingsdale — Lismore

Byron Shire Council commenced construction of a deviation between 26.5 and 28.0 miles from Lismore. When completed this deviation will eliminate a level crossing, railway overbridge and a section of poor alignment.

Construction of a deviation between 6.9 and 11.1 miles from Lismore was continued by Terania Shire Council.

Trunk Road No. 67 – Ivanhoe – Swan Hill

Balranald Shire Council commenced reconstruction to provide a gravel pavement between 62.3 and 64.9 miles north of Balranald. A final bituminous surface was applied between 17.1 and 19.9 miles north of Balranald.

Trunk Road No. 68 – Wentworth – Queensland Border near Mungindi

Reconstruction between 21.2 and 34.5 miles north of Wentworth was provided with a bituminous sand prime by Wentworth Shire Council.

Reconstruction, carried out by Central Darling Shire Council, was nearing completion, between 53.5 and 55.5 miles north of Trunk Road No. 66.

Darling Shire Council completed reconstruction and bituminous sealing between 0.0 and 3.0 miles east of Bourke.

Trunk Road No. 70 – Byrock – Queensland Border near Hebel

Brewarrina Shire Council completed reconstruction and bituminous sealing between 5.3 and 11.0 miles north of Brewarrina.

Trunk Road No. 72 – Willow Tree – Narrabri

Tamarang Shire Council completed widening of the existing 16 feet wide pavement to 22 feet between 5.5 and 7.0 miles south of Quirindi.

Trunk Road No. 73 – Inverell – Walcha

Inverell Municipal Council completed strengthening and widening between 0.0 and 1.2 miles south of State Highway No. 12.

Macintyre Shire Council continued reconstruction of the intersection with Main Road No. 135.

Guyra Shire Council completed construction of a two lane two cell 8 ft. x 8 ft. reinforced concrete box culvert 18 feet long and was continuing construction of approaches.

Uralla Shire Council completed reconstruction and bituminous sealing between 31.35 and 34.17 miles north of Uralla and work was commenced on construction of approaches to a four cell 11 ft. x 10 ft. reinforced concrete box culvert between 16.7 and 17.75 miles north of Uralla at Church Gully.

Trunk Road No. 74 – Armidale – South Grafton

Dumaresq Shire Council completed reconstruction between 43.0 and 45.7 miles east of Armidale, to prime seal stage.

Nymboida Shire Council completed reconstruction and bituminous surfacing between 30.4 and 31.6 miles south of Grafton and commenced reconstruction prior to bituminous surfacing between 31.6 and 32.6 miles south of Grafton.

Reconstruction and bituminous surfacing were completed between 58.1 and 59.0 miles south of Grafton.

Trunk Road No. 75 – Wollomombi – Kempsey

Macleay Shire Council completed reconstruction and bituminous surfacing between 24.2 and 26.5 miles west of Kempsey.

A bituminous surface has now been provided to 30.75 miles west of Kempsey except for two short breaks between 27.0 and 29.5 miles where extensive rock work is in hand in steep cuttings along the Macleay River.

Trunk Road No. 76 – Raleigh – Ebor

Bellingen Shire Council completed reconstruction and improvement to alignment on Dorrigo Mountain between 18.0 and 18.5 miles west of Raleigh.

Trunk Road No. 77 – Dunedoo – Gilgandra

Gilgandra Shire Council completed reconstruction and bituminous surfacing to 13.5 miles east of Gilgandra.

Trunk Road No. 78 – Cowra – Hume Highway near Ettamogah

Between 1.1 and 1.8 miles south of Cootamundra, Jindalee Shire Council commenced construction of approaches to a new bridge over Cootamundry Creek. Earthworks and some pavement work were completed and part of the work was opened to traffic.

Illabo Shire Council completed reconstruction and bituminous surfacing between 15.65 and 17.95 miles north of Wagga Wagga and commenced similar work between 17.95 and 18.8 miles.

Mitchell Shire Council completed reconstruction and bituminous surfacing between 4.5 and 5.0 miles south of Wagga Wagga.

Trunk Road No. 80 – Narrandera – Cobb Highway near Mossgiel

Narrandera Shire Council commenced reconstruction and bituminous surfacing between 0.0 and 0.4 miles west of State Highway No. 17 at Narrandera.

Leeton Shire Council completed reconstruction and bituminous surfacing between 18.6 and 20.4 miles west of Leeton.

Carrathool Shire Council completed bituminous surfacing between 17.5 and 25.4 miles south of Hillston and continued reconstruction between 25.4 and 37.7 miles south.

Trunk Road No. 81 – Broken Hill – Silverton

Broken Hill City Council applied a final bituminous surface over a length of 0.3 miles on the approaches to the new railway (Gypsum Street) overbridge, Broken Hill.

Trunk Road No. 82 – Newcastle – Jesmond

Newcastle City Council continued construction of dual carriageways between Swan Street, Hamilton, and Croudace Street, Lambton. The section between Broadmeadow Road and Edith Street was opened to traffic and connected with existing dual carriageways between Edith Street and Lloyd Road. When all sections are completed this road will link with State Highway No. 10 (Pacific Highway) at Hamilton and State Highway No. 23 at Jesmond.

Trunk Road No. 83 – South Grafton – Mt. Lindesay Highway near Woodenbong.

Reconstruction and bituminous surfacing were completed by Kyogle Shire Council between 6.2 and 7.3 miles north of Kyogle.

Trunk Road No. 84 – Bowning – Temora

Reconstruction and widening were completed by Demondrille Shire Council and Murrumburrah Municipal Council, between 1.2 and 2.0 miles west of Murrumburrah. Work included provision of two climbing lanes.

Reconstruction and bituminous surfacing were completed by Jindalee Shire Council between 22.2 and 22.9 miles west of Murrumburrah. This work included approaches to a new bridge over Flagstaff Creek.

Sealing of this work completed bituminous surfacing for the entire length between Bowning and Temora.

Trunk Road No. 89 – Tomingley – Narromine

Timbregongie Shire Council completed reconstruction and bituminous surfacing of the last gravel section between 14.1 and 18.7 miles south of Narromine.

Trunk Road No. 90 – State Highway No. 10 (Pacific Highway) – Gloucester – Purfleet

Manning Shire Council continued reconstruction and bituminous surfacing westerly from Purfleet to provide a dustless surface to the Gloucester Shire Boundary. A bitumen surface now exists to 27.9 miles from the Pacific Highway at Purfleet.

Trunk Road No. 91 – State Highway No. 1 (Prince's Highway) near Pambula – Bombala

Imlay Shire Council completed clearing work between 10.3 and 11.2 miles west of State Highway No. 1 near Pambula and continued construction of a culvert.

Some minor work on reconstruction and bituminous surfacing between 13.0 and 15.0 miles west of State Highway No. 1 was carried out and was opened to traffic on a running course of gravel.

Bibbenluke Shire Council completed reconstruction and bituminous surfacing between 6.5 and 8.2 miles east of Bombala.

Trunk Road No. 95 – Picton – State Highway No. 1 (Prince's Highway) at North Wollongong

A damaged timber culvert at Third Point Creek was replaced with an 84 inch diameter reinforced concrete pipe culvert.

Ordinary Main Roads*Main Road No. 108 – South Adamstown – Shoal Bay*

Elimination of a hazardous alignment was commenced on the temporary route through B.H.P. property on Kooragang Island between 1.19 and 1.64 miles east of Main Road No. 316.

Port Stephens Shire Council commenced construction of a four mile deviation having controlled access between Fern Bay and Williamtown. The deviation will be linked with approaches to Stockton Bridge and, when completed, will provide a high standard, flood free road on an improved alignment.

Main Road No. 111 – Pacific Highway near Khappinghat Creek – Forster – Bulahdelah

Reconstruction and bituminous surfacing were carried out by Stroud Shire Council from Red Hill to Bungwahl Cemetery between 11.2 and 14.6 miles from State Highway No. 10 Bituminous sealing between Bulahdelah and Forster is now complete.

Main Road No. 133 – Narrabri – Bingara

Bingara Shire Council completed realignment and reconstruction between 19.8 and 21.0 miles west of Bingara.

Main Road No. 134 – Bingara – Ashford

Bingara Shire Council completed reconstruction and bituminous surfacing between 4.37 and 6.78 miles north of Bingara.

Macintyre Shire Council completed to prime seal stage reconstruction between 9.8 and 11.5 miles south of Delungra and continued sealing between 6.95 and 9.8 miles south.

Main Road No. 135 – Tingha – Guyra

Guyra Shire Council commenced reconstruction and bituminous surfacing between 11.0 and 12.4 miles west of Guyra and continued similar work between 9.0 and 11.0 miles west of Guyra.

Bituminous surfacing work was completed between 7.5 and 9.0 miles west of Guyra.

Main Road No. 137 – Inverell – Bonshaw

Macintyre Shire Council continued widening and strengthening between 2.6 and 3.6 miles north of Inverell.

Ashford Shire Council completed to prime seal stage reconstruction and bituminous surfacing between 5.3 and 7.07 miles north of Ashford and has commenced reconstruction and bituminous surfacing between 7.07 and 9.0 miles north.

Main Road No. 206 – Dubbo – Dunedoo

Coolah Shire Council continued reconstruction and bituminous surfacing between 7.4 and 13.5 miles west of Dunedoo.

Main Road No. 208 – Muswellbrook – Mudgee

Cudgegong Shire Council completed reconstruction to basecourse stage between 11.8 and 12.8 miles from Mudgee.

Main Road No. 214 – Cassilis – Mudgee

Sealing was completed by Merriwa Shire Council on two sections between 0.35 and 2.5 miles south of Trunk Road No. 62 near Cassilis - including approaches to the bridge over Four Mile Creek.

Main Road No. 233 – Gulgong – Parkes

Cudgegong Shire Council completed reconstruction and bituminous surfacing between 20.2 and 22.0 miles west of Gulgong and completed construction to basecourse stage between 22.0 and 24.0 miles west of Gulgong.

Main Road No. 243 – Grong Grong – Coolamon – Junee – Gundagai

Coolamon Shire Council completed reconstruction and bituminous surfacing of two curves between 9.0 and 9.5 miles east of Coolamon at Marrar.

Main Road No. 256 – Goulburn – Oberon

Mulwaree Shire Council completed reconstruction and bituminous sealing between 10.8 and 11.75 miles and between 12.6 and 14.0 miles north of Goulburn. Similar work was also commenced between 16.1 and 17.45 miles north of Goulburn.

Reconstruction and bituminous surfacing were continued by Oberon Shire Council between 17.6 and 21.2 miles south of Oberon.

Main Road No. 271 – Braidwood – Moruya

Eurobodalla Shire Council completed construction of a deviation at Simpson's Farm, 7.0 miles west of Moruya.

The section between 2.4 and 3.65 miles west of Moruya was completed to prime seal stage.

Main Road No. 279 – Tumut – Gundagai

Tumut Shire Council completed reconstruction and bituminous surfacing between 6.55 and 9.1 miles north of Tumut and continued similar work between 9.1 and 10.4 miles north.

Main Road No. 282 – Tumbarumba – Jingellic – Mullengandra

Tumbarumba Shire Council continued reconstruction and bituminous surfacing between 11.0 and 19.2 miles southwards from Tumbarumba and completed the sealed surface to 16.9 miles from Tumbarumba.

Main Road No. 286 – Cooma – Mount Kosciuszko

Snowy River Shire Council completed construction to prime seal stage between 6.6 and 8.4 miles west of Cooma.

Pavement strengthening and deepening of table drains were carried out between 8.0 and 20.0 miles west of Jindabyne. The Department also completed laying a 2 inch thickness of asphaltic concrete, 20 feet wide, over the same length.

Main Road No. 291 – Winduella – Crookwell

Crookwell Shire Council completed reconstruction and bituminous surfacing between 6.0 and 9.1 miles from Crookwell.

Main Road No. 296 – Pretty Pine – Moulamein

Windouran Shire Council continued reconstruction and bituminous surfacing between 45.8 and 56.5 miles west of Deniliquin and sealed between 45.8 and 50.65 miles.

Main Road No. 316 – State Highway No. 10 at the intersection of Stewart Avenue and Parry Street, Newcastle to Mayfield.

Newcastle City Council completed construction of dual carriageways between George and Vine Streets, Mayfield, to link with the previously completed section between Elizabeth and George Streets. It is proposed to extend dual carriageway construction between Vine Street and State Highway No. 10 – Pacific Highway, Mayfield West. The total length of dual carriageway then available will be 2.6 miles.

Main Road No. 319 — Maude — Barham

Wakool Shire Council completed reconstruction and bituminous surfacing between 15.6 and 20.5 miles, 34.4 and 36.8 miles, 37.33 and 37.7 miles north of Barham.

Bituminous sealing between Barham and Moulamein is now completed.

Main Road No. 326 — Adamstown Heights — Mayfield North

Newcastle City Council continued construction of dual carriageways in Bridges Road, New Lambton, between St. James Road and Carnley Avenue including construction of a mountable kerbed median.

Main Road No. 329 — Baradine — Gwydir Highway near Grawan Bridge

Coonabarabran Shire Council completed to prime seal stage reconstruction between 6.9 and 10.5 miles north of Baradine including relocation of an existing level crossing to provide improved alignment of the approaches.

Main Road No. 331 — Berrigan — Holbrook — Jingellic

Corowa Shire Council continued reconstruction and bituminous surfacing between 3.0 and 5.4 miles east of Main Road No. 131, near Daysdale.

Reconstruction and bituminous surfacing were completed between 10.5 and 12.6 miles west of Culcairn by Culcairn Shire Council.

Holbrook Shire Council commenced reconstruction and gravelling between 23.6 and 26.3 miles east of Holbrook.

Main Road No. 334 — Mendooran — Belar Creek

Coolah Shire Council continued reconstruction and bituminous surfacing between 5.8 and 10.3 miles north of Mendooran. Completion of this section will provide a dust free surface between Mendooran and Coonabarabran.

Main Road No. 341 — Moama — Main Road No. 319 near Barham

Murray Shire Council completed reconstruction and bituminous surfacing between 46.1 and 50.1 miles west from State Highway No. 21 (Cobb Highway).

Main Road No. 343 — Wee Waa — Burren Junction

Namoi Shire Council completed construction to prime seal stage between 6.3 and 10.2 miles west of Wee Waa.

Main Road No. 380 — Trunk Road No. 56 near Boorowa — Cunningar

Boorowa Shire Council completed reconstruction and bituminous surfacing between 3.5 and 5.8 miles west of Trunk Road No. 56.

Demondrille Shire Council completed reconstruction and bituminous surfacing between 10.3 and 13.2 miles east of Trunk Road No. 84 at Cunnigar.

Main Road No. 384 — Alfred Town — Main Road No. 284

Kyeamba Shire Council completed reconstruction and bituminous surfacing between 22.7 and 24.1 miles south of Wagga Wagga, and continued similar work to 25.4 miles south of Wagga Wagga.

Main Road No. 398 — Grenfell — Dullah

Bland Shire Council continued reconstruction and bituminous surfacing between 0.2 and 4.95 miles east of Barmedman and reconstruction and drainage works between 0.3 and 7.7 miles west of Barmedman.

Reconstruction and bituminous surfacing were completed between 2.5 and 4.5 miles south of Aria Park by Narraburra Shire Council. Similar work was in progress between 3.7 and 5.0 miles north of Aria Park and between 8.1 and 10.6 miles east of Barmedman.

Main Road No. 505 — Erina — Terrigal

Reconstruction and bituminous surfacing were commenced by Gosford Shire Council between 0.2 and 2.6 miles from Erina. Similar work was completed between 2.1 and 2.7 miles from Erina.

Main Road No. 522 — Port Kembla — Shellharbour

Shellharbour Municipal Council completed construction of the eastern carriageway of a future dual carriageway road between Lake Entrance Road and Bass Street, Warilla and commenced construction of approaches to the bridge being constructed over Lake Illawarra (i.e. from Reddall Parade to the new Bridge).

Main Road No. 543 — The Rock — Coolamon

Mitchell Shire Council completed reconstruction and bituminous surfacing between 25.65 and 27.3 miles north of The Rock.

Coolamon Shire Council completed reconstruction and bituminous surfacing between 0.0 and 5.1 miles south of Coolamon.

Main Road No. 573 — Orange — Stuart Town — Wellington

Canobolas Shire Council completed reconstruction and bituminous surfacing between 15.0 and 19.2 miles north of Orange.

Main Road No. 596 — Morundah — Coleambally

Work was completed by Murrumbidgee Shire Council between 8.2 and 11.2 miles east of Main Road No. 321 and reconstruction was commenced between 6.6 and 8.2 miles east.

Developmental Roads*Development Road No. 1150 — Rockhurst — Giro and branch to Tiri Crossing.*

Gloucester Shire Council is continuing construction of the formation, gravel pavement, drainage works on the Willow Tree Deviation, between 20.4 and 21.2 miles from Gloucester.

Developmental Work No. 3163 — Dungog — East Gresford

Dungog Shire Council is continuing construction between Dungog and Gresford and is currently working between 8.0 and 10.5 miles from Dungog.

Tourist Roads*Tourist Road No. 4037 — State Highway No. 1 (Prince's Highway), 20 miles south of Eden — Womboyn Lake*

Imlay Shire Council completed reconstruction between 0.0 and 2.0 miles from State Highway No. 1.

Reconstruction was commenced between 2.0 and 3.5 miles from State Highway No. 1 to Womboyn Lake. Earthworks were completed and the work was opened to traffic on a gravel pavement.

Tourist Road No. 4041 — Scenic Hill Road, Griffith

Wade Shire Council completed construction and sealing for a length of 2.9 miles.

Tourist Road No. 4050 — Willans Hill Road — Southern Boundary of Willans Hill Reserve

Wagga Wagga City Council completed construction and sealing for a length of 1.2 miles.

Tourist Road No. 4051 — East Ballina — Lennox Head

Tintenbar Shire Council completed construction to basecourse gravel stage between 0.0 and 2.6 miles from the Shire Boundary.

BRIDGE CONSTRUCTION**General**

During the year 60 bridges and 79 bridge-size box culverts, i.e. with a waterway width of 20 feet or more, were made available for traffic. In addition, widening works or construction of footways were completed on 20 bridges.

The 139 structures are situated generally on Main and Developmental Roads, but a few are on unclassified roads at locations where the Department is responsible for bridging.

At the end of the year, 102 bridges and 64 bridge-size culverts were under construction on classified roads.

A table showing the number of structures completed on each road classification is set out below:—

	Express-Ways	State High-Ways	Trunk Roads	Ordinary Main Roads	Developmental-& Unclassified Roads	County Roads (Future Main Roads)	Total
Bridges	—	26	6	19	9	—	60
Bridge-size Culverts	—	34	9	32	4	—	79
Total	—	60	15	51	13	—	139

Of the completed bridges, 28 were built by the Department (14 by contract) and 30 by Councils (21 by contract). The two remaining bridges were built by the New South Wales Department of Railways, (1) and the Sydney City Council (1).

Thirty of the culverts were built by the Department (two by contract), and 49 by Councils (14 by contract).

Principal Bridgeworks Completed During the Year:

Black Bob's Creek — State Highway No. 2 — Hume Highway

The Department completed construction by contract of a 4 span reinforced and prestressed concrete bridge over Black Bob's Creek at 93.75 miles from Sydney. The new bridge is 280 feet in length and provides two lanes of traffic. It replaced a 20 feet span stone arch bridge.

Lower Warrell Creek — State Highway No. 10 — Pacific Highway

The Department completed construction by contract of a 6 span prestressed concrete bridge over Lower Warrell Creek, 2 miles south of Macksville. The new structure is 752 feet long, provides two traffic lanes and replaced an old timber bridge 144 feet in length.

Pedestrian Overpass, Korora Deviation — State Highway No. 10 — Pacific Highway

The Department completed construction of a prestressed concrete footbridge 216 feet long over State Highway No. 10 at 4.2 miles north of Coff's Harbour.

At 10.5 miles south of Woodburn — State Highway No. 10 — Pacific Highway

The Department completed construction of a 6 span, two lane reinforced and prestressed concrete bridge, 211 feet long, 10.5 miles south of Woodburn to replace a causeway.

Black Creek — State Highway No. 16 — Bruxner Highway

The Department completed construction by contract of a 2 lane, 240 feet long reinforced and prestressed concrete bridge over Black Creek, 80.2 miles west of Ballina. The new bridge is situated on a deviation of the Highway and the existing timber bridge will remain open for local traffic.

Tucker's Creek — State Highway No. 22 — Silver City Highway

The Department completed construction by contract of a 5 span, two lane steel and concrete bridge, 362 feet long, over Tucker's Creek at Wentworth. The new structure replaced a timber bridge, 301 feet in length.

Edward River — Main Road No. 319

Wakool Shire Council completed construction by contract of a six span reinforced concrete and steel bridge over the Edward River at Moulamein. The new structure is 316 feet in length, provides two traffic lanes and a footway, and replaced a narrow timber bridge, 356 feet long.

Billabong Creek — Main Road No. 547

Culcairn Shire Council completed construction by contract of a seven span reinforced concrete bridge over Billabong Creek at 5 miles north of Walla Walla. The new structure is 390 feet in length, provides two traffic lanes, and replaced an old timber bridge 110 feet long.

Principal Bridgeworks in Progress at the Beginning of the Year and not Completed:

Hawkesbury River at Peat's Ferry — Sydney-Newcastle Expressway

The Department continued construction by contract of a twelve span steel and reinforced concrete bridge over the Hawkesbury River at Peat's Ferry. The new structure will be 1,994 feet long and provide six traffic lanes.

Viaduct Structure — Western Distributor

The Department continued construction of the first stage of the Western Distributor south of the Sydney Harbour Bridge. The first stage consists of a viaduct which will be 2,040 feet overall and will provide two traffic lanes in each direction. The viaduct is a reinforced concrete box girder structure supported on reinforced concrete columns up to 74 feet high.

South Creek — Western Expressway

The Department continued construction, partly with its own forces and partly by contract, of twin three span prestressed concrete bridges to carry the Western Expressway over South Creek at St. Mary's. The new structure will be 210 feet long and provide four traffic lanes.

Bringelly Road Overbridge — Western Expressway

The Department continued construction, partly with its own forces and partly by contract, of a three span prestressed concrete girder bridge to carry Bringelly Road (Main Road No. 154) over the Western Expressway approximately 32.5 miles from Sydney. The new structure will be 290 feet long and provide six traffic lanes.

Nepean River at Regentville — Western Expressway

The Department continued construction by contract of a five span, 1,045 feet long prestressed concrete bridge over the Nepean River at Regentville. The new structure will initially provide two traffic lanes and two footways, with provision for future widening.

Mulgoa Road Underpass — Western Expressway

The Department continued construction partly with its own forces and partly by contract of a three span prestressed concrete girder bridge to carry the Western Expressway over Mulgoa Road (Main Road No. 155) at approximately 35 miles from Sydney. The new structure will be 211 feet long and have two traffic lanes.

Brooks Road Overbridge — South Western Expressway

The Department continued construction, partly with its own forces and partly by contract, of a four span steel and concrete bridge to carry Brooks Road over the South Western Expressway. The new structure will be 280 feet long and provide two traffic lanes.

Five Island Road — Southern Expressway

The Department continued construction by contract of twin three span prestressed concrete bridges to carry the Expressway over the proposed deviated route of Five Islands Road at approximately 54 miles from Sydney. The new structures will be 230 feet in length and will provide two southbound traffic lanes and three northbound traffic lanes.

The Avenue — Southern Expressway

The Department continued construction by contract of a single span reinforced and prestressed concrete bridge at "The Avenue", approximately 53 miles from Sydney. The new structure will be 227 feet in length and will provide five traffic lanes.

Master's Road — Southern Expressway

The Department continued construction by contract of a reinforced and prestressed concrete bridge to carry the future route of Master's Road over the Expressway at approximately 53 miles from Sydney. The new structure will be 262 feet in length and will provide two traffic lanes.

Macquarie Rivulet — State Highway No. 1 — Prince's Highway

The Department continued construction by contract of a reinforced and prestressed concrete bridge over Macquarie Rivulet at 13.5 miles south of Wollongong. The new five span structure will be 375 feet in length and will provide two traffic lanes.

Nepean River at Camden — State Highway No. 2 — Hume Highway

The Department continued construction by contract of a new steel and concrete bridge, 3,380 feet long, over the Nepean River at Camden, about one mile upstream from the present crossing. The new structure will consist of 26 spans each 130 feet in length and will carry two traffic lanes and one footway. The piled foundations have been constructed by the Department's own forces.

Overbridge at the Intersection of State Highways Nos. 2 and 3 — Hume Highway and Federal Highway

The Department continued construction by contract of a three span prestressed concrete bridge. The new two lane structure will eliminate the existing hazardous junction of the two Highways. The substructure was erected by the Department's own forces.

Ti-Tree Creek — State Highway No. 16 — Bruxner Highway.

The Department continued construction by contract of a three span, two lane steel and concrete bridge 224 feet long at Ti-Tree Creek, 85.4 miles from Ballina. The new structure is on a deviation of the Highway and the existing timber bridge, 113 feet long, will remain for use by local traffic following completion of the deviation.

North Channel of the Hunter River at Stockton — Main Road No. 108

The Department continued construction by contract of a 23 span reinforced and prestressed concrete bridge to eliminate the Newcastle-Stockton vehicular ferry service. The new structure will be 3,357 feet long with four traffic lanes and a footway. Bored pile foundations for 16 approach spans were constructed by the Department.

Lake Illawarra at Windang — Main Road No. 522

The Department continued construction by contract of a widened bridge over Lake Illawarra at Windang. The existing bridge consists of 33/30 ft. spans of timber beam superstructure on concrete piers, and provides two traffic lanes. The new structure, which will incorporate the old concrete piers will be of concrete construction and provide four traffic lanes.

Nowendoc River — Developmental Road No. 1282

Walcha Shire Council continued construction of a three span prestressed concrete girder bridge, 210 feet long, over the Nowendoc River at Nowendoc. The new structure will provide two traffic lanes and replace a timber bridge, 115 feet long.

Jacob's River — Developmental Road No. 1297

Snowy River Shire Council continued construction by contract of a concrete and steel girder bridge over Jacob's River, 40 miles from Jindabyne. The three span, 240 feet long structure will provide two traffic lanes and will replace two existing structures, each 40 feet in length

Cooks River – near International Airport Terminal

The Department continued construction by contract of a six span prestressed and reinforced concrete girder bridge over the Cook's River near the International Airport Terminal, Mascot. The new structure will be 691 feet long and will provide six traffic lanes.

Principal Bridgeworks Commenced During the Year and Not Completed:

Mamre Road Overbridge – Western Expressway

The Department commenced construction by contract of a four span prestressed concrete girder bridge to carry Mamre Road over the Expressway. The new structure will be 261 feet long and provide two traffic lanes.

King Avenue Underpass – Western Expressway

The Department commenced construction by contract of twin three span prestressed concrete box girder bridges to carry the Western Expressway over King Avenue. The new structures will be each 366 feet long and provide a total of four traffic lanes.

Roper Street Overpass – Western Expressway

The Department commenced construction of a four span prestressed concrete girder bridge to carry Roper Street over the Western Expressway. The new structure will be 290 feet long and provide three traffic lanes.

Kent Road Overpass – Western Expressway

The Department commenced construction by contract of a four span prestressed concrete girder bridge to carry Kent Road over the Western Expressway. The new structure will be 258 feet long and provide three traffic lanes.

Kingswood Road – Western Expressway

The Department commenced construction by contract of a four span prestressed concrete girder bridge to carry Kingswood Road over the Western Expressway. The new structure will be 258 feet long and provide two traffic lanes.

Raby Road Overpass – South Western Expressway

The Department commenced construction of a four span composite steel and concrete bridge to carry Raby Road over the South Western Expressway. The new structure will be 250 feet long and provide two traffic lanes.

First Crossing of Main Road No. 177 – South Western Expressway

The Department commenced construction of a four span continuous post-tensioned concrete bridge to carry Campbelltown Road over the South Western Expressway. The new structure will be 298 feet long and provide three traffic lanes.

Second Crossing of Main Road No. 177 – South Western Expressway

The Department commenced construction of twin three span prestressed concrete bridges to carry Campbelltown Road over the South Western Expressway. The new structures will each be 282 feet long and provide for a total of six traffic lanes.

Dry River at Quaama – State Highway No. 1 – Prince's Highway

The Department commenced construction, partly with its own forces and partly by contract, of a three span prestressed concrete bridge over the Dry River at Quaama. The new structure will be 210 feet long, provide two traffic lanes and replace a timber bridge, 188 feet long.

Willandra Creek – State Highway No. 7 – Mitchell Highway

The Department commenced construction by contract of a four span composite steel and concrete bridge over Willandra Creek, 7.2 miles west of Dubbo. The new structure will be 200 feet long, provide two traffic lanes and replace a timber bridge, 30 feet long.

South Arm of Bellinger River – State Highway No. 10 – Pacific Highway

The Department commenced construction by contract of a six span prestressed concrete bridge over the South Arm of the Bellinger River at Urunga. The new structure will be 752 feet long, provide two traffic lanes and replace a timber truss bridge, 690 feet long.

Murrumbidgee River at Balranald – State Highway No. 14 – Sturt Highway

The Department commenced construction by contract of a seven span composite steel and concrete bridge over the Murrumbidgee River at Balranald. The new structure will be 470 feet long, provide two traffic lanes and replace a steel truss bridge, 443 feet long.

Deep Creek (Piora Bridge) – State Highway No. 16 – Bruxner Highway

The Department commenced construction of a seven span concrete bridge over Deep Creek at Piora, 13.2 miles west of Casino. The new structure will be 420 feet long, provide two traffic lanes and replace a timber bridge, 156 feet long.

Murrumbidgee River at Hay — State Highway No. 21 — Cobb Highway

The Department commenced construction by contract of a six span steel and concrete bridge over Murrumbidgee River at Hay. The new structure will be 638 feet long, provide two traffic lanes and replace a timber and steel bridge, 786 feet long.

Dragon Swamp at Cathcart — Trunk Road No. 91

The Department commenced construction of a four span prestressed concrete bridge over Dragon Swamp at Cathcart. The new structure will be 300 feet long, provide two traffic lanes and replace a timber bridge, 92 feet long.

Duck Creek — Main Road No. 204

Bogan Shire Council commenced construction by contract of a ten span concrete bridge over Duck Creek, 22.7 miles north of Nyngan. The new structure will be 200 feet long, provide two traffic lanes and replace a timber bridge 153 feet long.

Cockle Creek at Teralba — Main Road No. 217

The Department commenced construction by contract of two eight span prestressed concrete bridges over Cockle Creek at Teralba. The new structures will each be 576 feet long and each provide two traffic lanes.

Lachlan River at Narrawa — Main Road No. 248

Crookwell Shire Council commenced construction by contract of a six span steel and concrete bridge over the Lachlan River at Narrawa. The new structure will be 472 feet long, provide two traffic lanes and replace a timber bridge, 213 feet long.

Calf Creek No. 1 and No. 2 — Main Road No. 319

Wakool Shire Council commenced construction by contract of an eleven span concrete bridge over Calf Creek at 5.55 miles north of Barham. The new structure will be 209 feet long, provide two traffic lanes and replace three existing timber bridges which have a combined length of 229 feet.

Big Badja River — Developmental Road No. 1268

Monaro Shire Council commenced construction by contract of a composite steel and concrete bridge over the Big Badja River, 25 miles from Cooma. The new structure will be 250 feet long and provide two traffic lanes.

Webb's Creek — Developmental Work No. 3154

Colo Shire Council commenced construction by contract of a three span composite steel and concrete bridge over Webb's Creek at Wiseman's Ferry. The new single lane structure will be 203 feet long.

George's River at Alford's Point — County Road No. 5016

The Department commenced construction by contract of an eleven span prestressed concrete bridge over the George's River at Alford's Point. The new structure will be 1,454 feet long and provide two traffic lanes. The foundations are being constructed to provide for future widening of the superstructure.

MAINTENANCE OF BRIDGES AND FERRIES

During the year the following major maintenance and repair works to bridges and ferries were carried out:—

Bridge over Shoalhaven River at Nowra — State Highway No. 1 — Prince's Highway

This structure is 1,638 feet in length, with eight steel truss spans and one 50 feet plate girder span. Replacement of almost all of the footway decking was carried out during the year.

Prince Alfred Bridge over the Murrumbidgee River at Gundagai — State Highway No. 2 — Hume Highway

This bridge is 3,040 feet long, having seventy-eight timber beam spans and three iron truss spans. Major repairs to timber structural members and the timber deck were continued during the year.

Bridge over Lachlan River at Cowra — State Highway No. 6 — Mid Western Highway

This structure is 1,047 feet in length and comprises three 160 feet truss spans and 18 timber beam spans. Major repairs were carried out during the year, including renewal of the deck on the truss spans, strengthening of the substructure on the approach spans, and provision of an asphaltic concrete surface on the approach spans.

Dennis Bridge over Hastings River at Blackmans Point near Port Macquarie — State Highway No. 10 — Pacific Highway

This steel bridge is 1,535 feet in length with seven truss and ten 70 feet girder spans. It was completely repainted during the year.

Bridge over Ellenborough River — State Highway No. 11 — Oxley Highway

This timber bridge is 252 feet long, and had two 90 feet truss spans and two 34 feet timber beam spans. One truss span collapsed after being damaged by the logs on a timber jinker. A temporary Bailey Bridge span has been erected to replace the demolished span.

Bridge over Castlereagh River at Coonabarabran – State Highway No. 11 – Oxley Highway

This 206 feet bridge comprises five 30 feet and two 25 feet timber beam spans.

The carriageway deck was completely replaced.

Bridge over the Murray River at Mildura – State Highway No. 14 – Sturt Highway

This steel bridge is 818 feet long with eleven 24 feet beam spans, four 122 feet truss spans, and a 65 feet lift span. Eight additional pedestrian refuges were erected on the deck.

Boolooroo Bridge over the Gwydir River at Camurra – State Highway No. 17 – Newell Highway

This bridge is 325 feet long, having three 90 feet timber truss spans and two 25 feet timber beam spans. An additional pier was constructed near the northern abutment to strengthen the northern span.

Bridge over Namoi River at Narrabri – State Highway No. 17 – Newell Highway

This timber bridge is 214 feet long and has one 90 feet truss span and four 30 feet timber beam spans. The carriageway deck was completely replaced and the bridge painted.

Hampden Bridge over Murrumbidgee River at Wagga Wagga – Trunk Road No. 78

This bridge is 645 feet in length with three 110 feet timber truss spans and nine timber beam spans. Major repairs to the trusses, girders, and decking, continued throughout the year.

Redbourneberry Bridge over the Hunter River at Singleton – Main Road No. 128

This bridge comprises three steel lattice truss spans and 26 timber beam spans, being 1,230 feet in length. Replacement of the timber decking on the timber beam spans was completed.

Bridge over Iron Cove, Sydney – Main Road No. 165

This steel bridge is 1,536 feet long and has seven 170 feet truss spans and four plate girder spans. During the year twelve additional lights were installed for the upstream footway which has been reconstructed to provide an additional lane for vehicular traffic.

Bridge over the Nepean River at Maldon – Main Road No. 179

This bridge comprises one 226 feet suspension span and seven timber beam approach spans. Renewal of the hangars between the stiffening trusses and the deck cross girders of the suspension span was commenced.

Fitzroy Bridge over South Creek at Windsor – Main Road No. 184

The deck of this 213 feet three span iron truss bridge was strengthened by the addition of a timber deck above the buckle plates and cross girders.

Guntawang Bridge over the Cudgegong River – Main Road No. 233

This timber bridge is 242 feet long, comprising a 70 feet truss span and six timber beam spans. Extensive repairs and painting were carried out.

Bridge over Wallaga Lake – Main Road No. 272

This bridge is 312 feet in length and has nine timber beam spans. Extensive repairs were carried out during the year to the piles, girders, corbels and decking.

Dunmore Bridge over Paterson River at Woodville – Main Road No. 301

This bridge is 428 feet long and has three 112 feet timber truss spans, one 58 feet steel girder lift span, and one 30 feet timber beam span. The whole timber deck was repaired.

Bridge over Murray River at Barham – Main Road No. 319

This bridge is 326 feet in length, with two timber truss spans, one steel lift span, and two timber beam spans. Extensive repairs to piles, girders, trusses and decking were carried out in the year.

Bridge over Wakool River at Coonamit – Main Road No. 386

This timber bridge is 420 feet long and consists of two 90 feet truss spans and seven timber beam spans. Extensive repairs were carried out during the year to piles, girders and decking.

Ferry Service over the Macleay River at Smithtown – Main Road No. 556

The steel hulled vehicular ferry vessel was dry docked, cleaned, overhauled, and painted at Ashby Dock on the Clarence River.

Bridge over the Murray River at Euston – Main Road No. 583

This steel bridge is 2,180 feet in length, has six girder spans, one 64 feet lift span, and 67 beam spans. Work was continued on the replacement of the timber decking and kerbing of the 67 steel beam spans.

Pallamallawa Bridge over Gwydir River in the Shire of Boolooroo.

This timber bridge is 307 feet long, having two 90 feet truss spans and four 30 feet timber beam spans. Extensive repairs were carried out to girders and decking.

ELIMINATION OF RAILWAY LEVEL CROSSINGS ON MAIN ROADS

During the year, seven (7) level crossings were eliminated from the Main Roads System:—

State Highway No. 9 — New England Highway

A level crossing at Starr Street, Guyra and another at Llangothlin were eliminated from the Main Roads System by the construction of a deviation between Guyra and Llangothlin. Both crossings have been retained for use by local traffic. During construction of the deviation a bridge was erected over the railway line serving the Guyra Abattoir.

Trunk Road No. 61

One level crossing was eliminated by the construction of an overbridge at Ootha, 41.5 miles west of Parkes.

Main Road No. 129

One level crossing was eliminated by the construction of an overbridge at 4.5 miles north of Coonabarabran.

Main Road No. 206

Two level crossings were eliminated from the Main Roads system by the construction of a deviation in conjunction with the erection of a new bridge over Spicer's Creek, 32 miles from Dunedoo. Both crossings have been retained for use by local traffic.

Main Road No. 289

One level crossing was eliminated at Nooroo by the construction of a deviation.

Since the Main Roads Act came into effect in 1925, a total of 188 level crossings have been eliminated from Main Roads. There remain 377 crossings on Main Roads comprising 324 on New South Wales Government Railway Lines, 42 on privately-owned railways and 11 on Victorian Government Railways which extend into New South Wales.

To improve safety conditions at existing level crossings, improvements were carried out at a number of locations by the installation of seven sets of automatically operated flashing lights, widening of level crossings and approaches and realignment of the approaches.

The improvements to, or elimination of, a number of level crossings during the year were recommended by the Inter-Departmental Level Crossing Committee of which the Department of Main Roads is a member. This Committee met on three occasions throughout the year.

TRAFFIC SERVICE

Median Strips

During the year a total length of 7.8 miles of median strip was constructed, of which approximately 46% was in the Sydney Metropolitan Area. The balance was constructed in the City of Newcastle, the Municipality of Queanbeyan and the Shires of Wyong and Lake Macquarie.

Channelisation of Intersections

Channelisation was completed at 28 intersections and work was in progress at a further 11 sites. During the year, designs were completed for the future channelisation at 40 intersections.

Included in the sites where construction of channelisations was completed were:—

State Highway No. 1	Princes Highway, Shire of Sutherland. Intersection with Main Road No. 393 — Farnell Avenue, Loftus.
State Highway No. 2	Hume Highway, City of Goulburn. Intersection with Main Road No. 248, Goulburn.
State Highway No. 5	Great Western Highway, Municipality of Ashfield. Intersection with Secondary Road No. 2056 — Wattle Street and Secondary Road No. 2014 — Fredrick Street, Ashfield..
State Highway No. 9	New England Highway, City of Armidale. Intersection with Main Road No. 124 — Niagara Street, at Armidale.
State Highway No. 9	New England Highway, Shire of Guyra. Intersection with Starr Street, Guyra.
State Highway No. 9	New England Highway, Shire of Guyra. Intersection with Main Road No. 135 — Ollera Street, Guyra.
State Highway No. 10	Pacific Highway, City of Newcastle. Intersection with Anderson Drive at Beresfield.
State Highway No. 10	Pacific Highway, City of Grafton. Intersection with Main Road No. 151 at Coffs Harbour (in conjunction with traffic signals).
State Highway No. 20	Riverina Highway, Municipality of Deniliquin. Intersection with State Highway No. 21 — Cobb Highway and Main Road No. 552 — Wanderer Street at North Deniliquin.
State Highway No. 22	Silver City Highway, City of Broken Hill. Intersection with Trunk Road No. 81 — Gypsum Street, Broken Hill.
State Highway No. 22	Silver City Highway, City of Broken Hill. Intersection with Gaffney Street, Broken Hill.

Trunk Road No. 51	Monaro Street, Municipality of Queanbeyan. Intersection with Trunk Road No. 52 — Crawford Street, Queanbeyan.
Trunk Road No. 82	Young Street, City of Newcastle. Intersection with Main Road No. 326 — Turton Street, Newcastle.
Trunk Road No. 82	Young Street, City of Newcastle. Intersection with Main Road No. 188 — Waratah Road, Newcastle.
Main Road No. 154	Richmond Road, City of Penrith. Intersection with Secondary Road No. 2063 — Londonderry Road and Cranebrook Road, Londonderry.
Main Road No. 159	Belgrave Street and Pittwater Road, Municipality of Manly. Intersection with Raglan Street, Manly.
Main Road No. 164	Spit Road, Municipality of Mosman. Adjustments to channelisation at the north and south intersections with Secondary Road No. 2051 — Parriwi Road (in conjunction with traffic signals).
Main Road No. 164	Military Road, Municipality of Mosman. Adjustments to channelisation at the intersection with Secondary Road No. 2019 — Spofforth Street (in conjunction with traffic signals).
Main Road No. 165	Victoria Road, City of Parramatta. Intersection with Main Road No. 574 — Pennant Street, Parramatta.
Main Road No. 184	Church Street, City of Parramatta. Intersection with North Rocks Road, Northmead.
Main Road No. 223	Main Road, Shire of Lake Macquarie. Intersection with Main Road No. 527 — Macquarie Road at Cardiff.
Main Road No. 316	Gross Street, City of Newcastle. Intersection with George Street, Mayfield.
Main Road No. 316	Crebert Street, City of Newcastle. Intersection with Ingall Street, Mayfield.
Main Road No. 335	Coral Street, Shire of Wyong. Intersection with Bent Street, Wyong.
Main Road No. 373.	Carlingford Road, Shire of Hornsby and City of Parramatta. Intersection with Main Road No. 139 — Beecroft Road, Epping.
Main Road No. 373	Epping Road, Municipality of Ryde. Intersection with Herring Road, Marsfield
Secondary Road 2060	Punchbowl Road, Municipality of Canterbury. Intersection with Koala Street, Punchbowl.

Bus Bays

Ten bus bays were constructed during the year. Seven of the bays were in the Sydney Metropolitan Area while the remainder were in the Shires of Colo, Coffs Harbour and Stroud.

Climbing Lanes

The construction of 15 climbing lanes was completed during the year. Work at four locations is still in progress. During the year climbing lanes were completed on:—

State Highway No. 1	Princes Highway (i) 8 miles south of Kiama (ii) 1 mile north of Nowra
State Highway No. 2	Hume Highway One lane for each direction of travel on Razorback Range, 4 miles north of Picton.
State Highway No. 5	Great Western Highway (i) 25 miles west of Lithgow (ii) 27 miles west of Lithgow
State Highway No. 6	Mid Western Highway. 28 miles south of Blayney.
State Highway No. 7	Mitchell Highway. 12 miles west of Bathurst
State Highway No. 9	New England Highway. 20 miles west of Maitland at Belford
State Highway No. 10	Pacific Highway. (i) 3 miles north of Bulahdelah (ii) One lane for each direction of travel between 3 and 5 miles north of Coffs Harbour
Main Road No. 184	Bells Line of Road 29 miles west of Windsor at Mt. Tomah
Trunk Road No. 78	Olympic Way 4.5 miles south of Wagga Wagga.
Trunk Road No. 84	Temora — Bowning Road One lane for each direction of travel between 1 and 2 miles west of Murrumburrah.

Signposting and Roadside Furnishings:

Improvements to the signing of the Main Road System throughout the State was continued, with particular emphasis being given in rural areas to the erection of larger reflectorised direction signs and the removal of the old-type finger boards carrying a multiplicity of town names at intersections. Finger boards

BITUMINOUS SURFACING

BITUMINOUS SURFACING COMPLETED DURING THE YEAR ENDED 30TH JUNE, 1971

Scheduled According to Road Classifications

Table 2 - Lane Miles

Nature of Work	Expressways	State Highways	Trunk Roads	Ordinary Main Roads	Secondary Roads	Tourist Roads	Developmental Roads	Unclassified Roads	All Roads Sub Total
1. Initial Surfacing									
A. Prime	-	11.38	5.00	17.88	-	-	-	-	34.26
B. Primer Seal	-	74.14	26.70	31.26	-	-	-	-	132.10
C. Sprayed Seal	-	95.84	64.10	322.28	-	11.74	17.58	12.00	523.54
D. Slurry Seal	-	-	-	-	-	-	-	-	-
E. Plant Mix	-	-	-	0.66	-	-	-	-	0.66
Sub Total:	-	181.36	95.80	372.08	-	11.74	17.58	12.00	690.56
2. Surfacing Lengths Primed Before this Year									
A. Prime	-	-	-	-	-	-	-	-	-
B. Primer Seal	-	5.58	-	-	-	-	-	-	5.58
C. Sprayed Seal	-	94.18	31.24	7.56	-	-	-	-	132.98
D. Slurry Seal	-	-	-	-	-	-	-	-	-
E. Plant Mix	-	-	-	-	-	-	-	-	-
Sub Total:	-	99.76	31.24	7.56	-	-	-	-	138.56
3. Restoration after Widening and/or Strengthening:									
A. Prime	-	9.41	-	0.22	-	-	-	-	9.63
B. Primer Seal	-	-	-	-	-	-	-	-	-
C. Sprayed Seal	-	63.92	6.70	20.46	-	-	-	-	91.08
D. Slurry Seal	-	-	-	-	-	-	-	-	-
E. Plant Mix	-	1.12	-	22.77	2.32	-	-	-	26.21
Sub Total:	-	74.45	6.70	43.45	2.32	-	-	-	126.92
4. Restoration after Adding Lanes:									
A. Prime	-	-	-	-	-	-	-	-	-
B. Primer Seal	-	-	-	-	-	-	-	-	-
C. Sprayed Seal	-	20.73	1.76	0.97	-	-	-	-	23.46
D. Slurry Seal	-	-	-	-	-	-	-	-	-
E. Plant Mix	-	19.42	3.51	35.47	5.00	-	-	-	63.40
Sub Total:	-	40.15	5.27	36.44	5.00	-	-	-	86.86
5. Restoration after New Alignment and/or grade:									
A. Prime	-	11.90	-	-	-	-	-	-	11.90
B. Primer Seal	-	13.36	-	4.66	-	-	-	-	18.02
C. Sprayed Seal	-	84.97	26.36	14.26	-	0.30	-	-	125.89
D. Slurry Seal	-	-	-	-	-	-	-	-	-
E. Plant Mix	-	19.10	-	3.20	3.42	-	-	-	25.72
Sub Total:	-	129.33	26.36	22.12	3.42	0.30	-	-	181.53
6. Maintenance Resurfacing:									
A. Prime	-	-	-	-	-	-	-	-	-
B. Primer Seal	-	2.02	-	5.00	-	-	-	-	7.02
C. Sprayed Seal	-	502.18	191.86	440.23	1.82	4.94	-	-	1,141.03
D. Slurry Seal	-	-	-	-	-	-	-	-	-
E. Plant Mix	5.76	53.52	0.70	76.10	25.36	-	-	-	161.44
Sub Total:	5.76	557.72	192.56	521.33	27.18	4.94	-	-	1,309.49
Summary of 1 to 6:-									
A. Prime	-	32.69	5.00	18.10	-	-	-	-	55.79
B. Primer Seal	-	95.10	26.70	40.92	-	-	-	-	162.72
C. Sprayed Seal	-	861.82	322.02	805.76	1.82	16.98	17.58	12.00	2,037.98
D. Slurry Seal	-	-	-	-	-	-	-	-	-
E. Plant Mix	-	93.16	4.21	138.20	36.10	-	-	-	277.43
TOTAL:	5.76	1,082.77	357.93	1,002.98	37.92	16.98	17.58	12.00	2,533.92

BITUMINOUS SURFACING

BITUMINOUS SURFACING COMPLETED DURING THE YEAR ENDED 30TH JUNE, 1971

Scheduled According to Road Classifications

Table 1 - Road Miles

Nature of Work	Expressways	State Highways	Trunk Roads	Ordinary Main Roads	Secondary Roads	Tourist Roads	Developmental Roads	Unclassified Roads	All Roads Sub Total
1. Initial Surfacing									
A. Prime	-	5.69	2.50	8.94	-	-	-	-	17.13
B. Primer Seal	-	37.07	13.35	15.63	-	-	-	-	66.05
C. Sprayed Seal	-	47.92	32.05	161.14	-	5.87	8.79	6.00	261.77
D. Slurry Seal	-	-	-	-	-	-	-	-	-
E. Plant Mix	-	-	-	0.22	-	-	-	-	0.22
Sub Total:	-	90.68	47.90	185.93	-	5.87	8.79	6.00	345.17
2. Surfacing Lengths Primed Before this Year									
A. Prime	-	-	-	-	-	-	-	-	-
B. Primer Seal	-	2.79	-	-	-	-	-	-	2.79
C. Sprayed Seal	-	46.75	15.62	3.78	-	-	-	-	66.15
D. Slurry Seal	-	-	-	-	-	-	-	-	-
E. Plant Mix	-	-	-	-	-	-	-	-	-
Sub Total:	-	49.54	15.62	3.78	-	-	-	-	68.94
3. Restoration after Widening and/or Strengthening									
A. Prime	-	4.35	-	0.11	-	-	-	-	4.46
B. Primer Seal	-	-	-	-	-	-	-	-	-
C. Sprayed Seal	-	31.69	3.35	9.77	-	-	-	-	44.81
D. Slurry Seal	-	-	-	-	-	-	-	-	-
E. Plant Mix	-	0.28	-	6.43	0.65	-	-	-	7.36
Sub Total:	-	36.32	3.35	16.31	0.65	-	-	-	56.63
4. Restoration after Adding Lanes									
A. Prime	-	-	-	-	-	-	-	-	-
B. Primer Seal	-	-	-	-	-	-	-	-	-
C. Sprayed Seal	-	8.61	0.57	0.53	-	-	-	-	9.71
D. Slurry Seal	-	-	-	-	-	-	-	-	-
E. Plant Mix	-	6.56	0.96	8.60	1.51	-	-	-	17.63
Sub Total:	-	15.17	1.53	9.13	1.51	-	-	-	27.34
5. Restoration after New Alignment and/or Grade									
A. Prime	-	5.95	-	-	-	-	-	-	5.95
B. Primer Seal	-	6.49	-	2.33	-	-	-	-	8.82
C. Sprayed Seal	-	39.39	13.05	6.75	-	0.15	-	-	59.34
D. Slurry Seal	-	-	-	-	-	-	-	-	-
E. Plant Mix	-	5.35	-	0.76	0.60	-	-	-	6.71
Sub Total:	-	57.18	13.05	9.84	0.60	0.15	-	-	80.82
6. Maintenance Resurfacing									
A. Prime	-	-	-	-	-	-	-	-	-
B. Primer Seal	-	1.01	-	2.50	-	-	-	-	3.51
C. Sprayed Seal	-	250.89	95.93	219.85	0.91	2.47	-	-	570.05
D. Slurry Seal	-	-	-	-	-	-	-	-	-
E. Plant Mix	1.44	20.80	0.14	27.31	7.90	-	-	-	57.59
Sub Total:	1.44	272.70	96.07	249.66	8.81	2.47	-	-	631.15
Summary of 1 to 6									
A. Prime	-	15.99	2.50	9.05	-	-	-	-	27.54
B. Primer Seal	-	47.36	13.35	20.46	-	-	-	-	81.17
C. Sprayed Seal	-	425.25	160.57	401.82	0.91	8.49	8.79	6.00	1,011.83
D. Slurry Seal	-	-	-	-	-	-	-	-	-
E. Plant Mix	1.44	32.99	1.10	43.32	10.66	-	-	-	89.51
TOTAL:	1.44	521.59	177.52	474.65	11.57	8.49	8.79	6.00	1,210.05

BITUMINOUS SURFACING COMPLETED DURING THE YEAR ENDED 30TH JUNE, 1971

Scheduled according to work by Department and Councils

Table 1 - Road Miles

Nature of Work	By Department		By Councils	
	Direct	Contract	Direct	Contract
1. Initial Surfacing				
A. Prime	5.33	-	3.58	8.22
B. Primer Seal	32.47	-	5.79	27.79
C. Sprayed Seal	46.75	-	31.09	183.93
D. Slurry Seal	-	-	-	-
E. Plant Mix	0.22	-	-	-
Sub Total:	84.77	-	40.46	219.94
2. Surfacing Lengths Primed before This Year				
A. Prime	-	-	-	-
B. Primer Seal	2.79	-	-	-
C. Sprayed Seal	45.72	2.08	-	18.35
D. Slurry Seal	-	-	-	-
E. Plant Mix	-	-	-	-
Sub Total:	48.51	2.08	-	18.35
3. Restoration After Widening and/or Strengthening				
A. Prime	3.32	0.32	0.82	-
B. Primer Seal	-	-	-	-
C. Sprayed Seal	31.09	0.83	1.48	11.41
D. Slurry Seal	-	-	-	-
E. Plant Mix	4.49	-	0.65	2.22
Sub Total:	38.90	1.15	2.95	13.63
4. Restoration After Adding Lanes				
A. Prime	-	-	-	-
B. Primer Seal	-	-	-	-
C. Sprayed Seal	7.59	-	0.57	1.55
D. Slurry Seal	-	-	-	-
E. Plant Mix	11.21	-	3.26	3.16
Sub Total:	18.80	-	3.83	4.71
5. Restoration after New Alignment and/or Grade				
A. Prime	5.95	-	-	-
B. Primer Seal	2.93	3.56	2.33	-
C. Sprayed Seal	27.48	8.75	1.53	21.58
D. Slurry Seal	-	-	-	-
E. Plant Mix	5.75	-	0.51	0.45
Sub Total:	42.11	12.31	4.37	22.03
6. Maintenance Resurfacing				
A. Prime	-	-	-	-
B. Primer Seal	1.01	-	-	2.50
C. Sprayed Seal	225.74	28.55	30.79	284.97
D. Slurry Seal	-	-	-	-
E. Plant Mix	29.46	12.25	1.79	14.09
Sub Total:	256.21	40.80	32.58	301.56
Summary of 1 to 6				
A. Prime	14.60	0.32	4.40	8.22
B. Primer Seal	39.20	3.56	8.12	30.29
C. Sprayed Seal	384.37	40.21	65.46	521.79
D. Slurry Seal	-	-	-	-
E. Plant Mix	51.13	12.25	6.21	19.92
TOTAL:	489.30	56.34	84.19	580.22

Summary
By Department
By Councils

545.64 miles
664.41 miles
Total: 1,210.05 miles

have been replaced by large reflectorised signs showing only the names of key towns along each route, while the names of smaller towns are given on reassurance signs which are located at convenient places beyond intersections.

In conformity with a national policy for colour coding of signs, the Department has adopted blue signs with white letters to indicate services available to motorists, such as rest areas, fireplaces and parking areas. It has also adopted a brown colour with white letters for tourist signs and has approached all Councils with a suggestion that local scenic and historic routes be marked with a standard Tourist Route Marker and be numbered, using the white on brown colours.

The use of raised pavement markers in lieu of painted lane lines on expressways and major urban arterials has continued. In addition, experimental work has been undertaken in rural areas to test the effectiveness of the use of widely spaced reflective pavement markers on the road centreline as an alternative means of road delineation at night, while in urban areas the use of amber reflective markers adjacent to median strips has been found to be an effective means of median delineation.

Accident Analysis and Investigation:

The special investigation of all fatal accidents on State Highways which was commenced in 1966, was continued throughout 1970-71. Detailed studies of accidents at specific accident prone situations has also continued. On the Sydney-Newcastle Expressway an analysis of accidents for the year ended 31st December, 1970, showed that there were no fatal accidents and that the accident rate for all property damage and injury accidents was 1.59 per million vehicle miles of travel for the year. Although accurate figures for miles of vehicular travel are not available for all New South Wales roads it appears from estimates that the accident rate on the Expressway is less than a quarter of the average accident rate on other state roads.

Advisory Speed Surveys

Advisory speed surveys were conducted on 1,320 miles of road, including 380 miles which were re-surveyed because of changes in the speed limits. A total of 7,150 miles of roads have now been surveyed or re-surveyed due to speed limit changes throughout the State.

Included in the 34 roads on which surveys were conducted are:—

- State Highway No. 6 between Cowra and Marsden
- State Highway No. 17 between Dubbo and Gilgandra
- Trunk Road No. 55 between Marrangaroo and Coolah
- Trunk Road No. 84 between Bowning and Temora
- Trunk Road No. 90 between Karuah and Taree
- Main Road No. 239 between Young and Grenfell
- Main Road No. 253 between Oberon and Bathurst
- Main Road No. 503 between Wilberforce and Singleton

BITUMINOUS SURFACING COMPLETED DURING THE YEAR ENDED 30TH JUNE, 1971

Scheduled according to work by Department and Councils

Table 2 - Lane Miles

Nature of Work	By Department		By Councils	
	Direct	Contract	Direct	Contract
1. Initial Surfacing:				
A. Prime	10.66	-	7.16	16.44
B. Primer Seal	64.94	-	11.58	55.58
C. Sprayed Seal	93.50	-	62.18	367.86
D. Slurry Seal	-	-	-	-
E. Plant Mix	0.66	-	-	-
Sub Total:	169.76	-	80.92	439.88
2. Surfacing Lengths Primed Before This Year:				
A. Prime	-	-	-	-
B. Primer Seal	5.58	-	-	-
C. Sprayed Work	92.12	4.16	-	36.70
D. Slurry Seal	-	-	-	-
E. Plant Mix	-	-	-	-
Sub Total:	97.70	4.16	-	36.70
3. Restoration after Widening and/or Strengthening ;				
A. Prime	6.64	0.64	2.35	-
B. Primer Seal	-	-	-	-
C. Sprayed Seal	62.98	1.66	2.96	23.48
D. Slurry Seal	-	-	-	-
E. Plant Mix	17.88	-	2.12	6.21
Sub Total:	87.50	2.30	7.43	29.69
4. Restoration after Adding Lanes:				
A. Prime	-	-	-	-
B. Primer Seal	-	-	-	-
C. Sprayed Seal	20.00	-	1.76	1.70
D. Slurry Seal	-	-	-	-
E. Plant Mix	42.29	-	10.23	10.88
Sub Total:	62.29	-	11.99	12.58
5. Restoration after New Alignment and/or Grade:				
A. Prime	11.90	-	-	-
B. Primer Seal	5.86	7.50	4.66	-
C. Sprayed Seal	58.73	17.70	3.32	46.14
D. Slurry Seal	-	-	-	-
E. Plant Mix	20.86	-	3.06	1.80
Sub Total:	97.35	25.20	11.04	47.94
6. Maintenance Resurfacing:				
A. Prime	-	-	-	-
B. Primer Seal	2.02	-	-	5.00
C. Sprayed Seal	451.04	55.97	62.96	571.06
D. Slurry Seal	-	-	-	-
E. Plant Mix	86.87	24.50	5.90	44.17
Sub Total:	539.93	80.47	68.86	620.23
Summary of 1 to 6				
A. Prime	29.20	0.64	9.51	16.44
B. Primer Seal	78.40	7.50	16.24	60.58
C. Sprayed Seal	778.37	79.49	133.18	1046.94
D. Slurry Seal	-	-	-	-
E. Plant Mix	168.56	24.50	21.31	63.06
Sub Total:	1,054.53	112.13	180.24	1,187.02

SUMMARY

By Department
By Council

1, 166.66

1, 367.26

TOTAL:

2,533.92

TYPES OF ROAD SURFACES AT 30TH JUNE, 1971

Scheduled According to Road Classifications

	Cement Concrete	Bitumen Concrete	Bitumen Other	Gravel	Formed Only	Natural Surface	Total
COUNTY OF CUMBERLAND							
Expressways	-	12.97	-	-	-	-	12.97
State Highways	28.39	140.03	25.19	-	-	-	193.61
Trunk Roads	-	-	-	-	-	-	-
Main Roads	42.30	364.33	276.55	1.66	-	0.13	684.97
Secondary Roads	10.42	125.48	33.31	-	0.53	0.65	170.39
Tourist Roads	-	4.95	36.81	2.26	0.50	8.50	53.02
Developmental Roads	-	-	5.40	3.72	0.20	4.28	13.60
Unclassified Roads	-	0.65	1.30	-	-	-	1.95
Sub Total	81.11	648.41	378.56	7.64	1.23	13.56	1,130.51
COUNTRY							
Expressways	-	13.82	-	-	-	-	13.82
State Highways	27.31	230.50	5,300.74	351.10	432.74	-	6,342.39
Trunk Roads	5.80	9.78	2,512.65	1,222.51	581.04	-	4,331.78
Main Roads	9.00	155.86	4,801.49	4,083.08	1,747.25	31.75	10,828.43
Secondary Roads	-	-	-	-	-	-	-
Tourist Roads	-	0.92	118.19	43.74	7.98	18.92	189.75
Developmental Roads	-	-	121.32	1,655.62	691.60	187.60	2,656.14
Unclassified Roads	-	-	28.44	11.48	1,527.27	-	1,567.19
Sub Total	42.11	410.88	12,882.83	7,367.53	4,987.88	238.27	25,929.50
TOTAL FOR STATE OF NEW SOUTH WALES (COUNTRY AND COUNTY OF CUMBERLAND)							
Expressways	-	26.79	-	-	-	-	26.79
State Highways	55.70	370.53	5,325.93	351.10	432.74	-	6,536.00
Trunk Roads	5.80	9.78	2,512.65	1,222.51	581.04	-	4,331.78
Main Roads	51.30	520.19	5,078.04	4,084.74	1,747.25	31.88	11,513.40
Secondary Roads	10.42	125.48	33.31	-	0.53	0.65	170.39
Tourist Roads	-	5.87	155.00	46.00	8.48	27.42	242.77
Developmental Roads	-	-	126.72	1,659.34	691.80	191.88	2,669.74
Unclassified Roads	-	0.65	29.74	11.48	1,527.27	-	1,569.14
TOTAL	123.22	1,059.29	13,261.39	7,375.17	4,989.11	251.83	27,060.01

TYPES OF ROAD SERVICES AS AT 30TH JUNE, 1971

Schedules According to Department's Divisions

Division	Natural Surface	Formed Only	Gravel	Primed Only	Primer Sealed	Sprayed Seal	Slurry Seal	Plant Mix	Cement Concrete	Total
Metropolitan	0.53	-	-	-	-	16.19	-	351.87	45.58	414
Parramatta	-	-	-	-	-	-	-	-	-	-
County of Cumberland	0.25	0.53	1.66	-	-	254.04	-	230.71	29.48	516
Country	13.50	2.18	24.34	-	-	154.54	-	61.63	-	256
Sub Total	13.75	2.71	26.00	-	-	408.58	-	292.34	29.48	772
Central Mountains	-	-	-	-	-	-	-	-	-	-
County of Cumberland	12.78	0.70	5.98	-	-	64.26	-	21.30	-	105
Country	2.65	3.60	426.77	-	0.23	571.68	0.52	3.27	17.64	1,026
Sub Total	15.43	4.30	432.75	-	0.23	635.94	0.52	24.57	17.64	1,131
Illawarra	-	-	-	-	-	-	-	-	-	-
County of Cumberland	-	-	-	-	-	44.07	-	44.53	6.05	94
Country	-	-	107.10	4.13	-	316.47	-	171.46	1.76	600
Sub Total	-	-	107.10	4.13	-	360.54	-	215.99	7.81	695
Hunter Valley	3.75	-	133.64	-	1.31	777.32	2.75	141.82	4.03	1,064
Lower North Coast	10.20	104.14	250.65	-	-	517.82	-	0.42	-	883
North Eastern	17.17	-	327.35	-	-	1,002.35	-	-	16.52	1,363
Upper Northern	71.65	-	823.37	8.71	74.78	881.10	-	-	0.29	1,859
North Western	7.12	38.08	844.37	6.16	8.18	1,128.80	-	0.20	0.16	2,033
Central Western	34.52	69.63	978.85	1.74	5.29	1,478.49	-	0.75	0.30	2,569
Central Northern	57.09	1,530.83	1,057.59	2.86	43.30	880.32	-	-	-	3,571
Murray Darling	-	3,070.52	272.68	-	23.79	641.84	-	-	-	4,008
Central Murray	7.50	110.41	715.18	4.03	0.74	1,084.70	0.63	0.28	0.06	1,923
South Coast	-	11.98	318.08	5.83	-	588.40	-	12.48	0.35	937
South Western	12.12	40.51	557.76	-	3.24	1,752.63	-	4.20	-	2,370
Southern	1.00	6.00	529.80	1.17	35.56	871.42	-	14.37	1.00	1,460
TOTAL	251.83	4,989.11	7,375.17	34.63	196.42	13,026.44	3.90	1,059.29	123.22	27,060

PLANT AND MOTOR VEHICLES

During the year plant to the value of \$3,319,572.00 and Motor Vehicles to the value of \$1,037,230.00 were purchased to replace existing items and to provide for additional needs.

The Department placed an order for a second Benoto Super-EDF Pile Boring Machine at a cost of approximately \$135,000.00. Tenders are currently being examined for the supply of a Rotary Bucket Drill, truckmounted, for use in conjunction with the above machine. Anticipated cost is approximately \$80,000.00. Both Benoto Pile Boring Machine and the Rotary Bucket Drill will be used initially on boring pile foundations for the overhead roadway of the North Western Expressway from the City of Sydney across Darling Harbour Railway Goods Yard towards The Glebe.

An order was placed for the supply of a Mobile Asphalt Plant at a total cost of \$135,577.00. This plant will be used eventually on a Divisional area basis throughout the State.

The total value of payments made to private owners for the hire of plant was \$7,729,630.00 an increase of approximately 31 percent on the previous year.

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

Central Workshop

A total of 6,810 jobs were completed by Central Workshop during this period for a total value of \$3,160,375.00.

The Workshop's activities during the year were as follows:-

Property repairs and general building and carpentry work	25%
Sign Manufacture	12%
Manufacture and repair of plant and overhaul of ferries	16%
Plumbing and electrical services to Metropolitan and Parramatta Divisions and general transport services	10%
Structural steelwork and concrete reinforcing steel for bridges etc.	15%
Special projects and other miscellaneous work	22%

Designs were completed and manufacture commenced of a Machine for cleaning Corrugated Steel Guard Rail and of two new Heavy Duty Centre - articulated Linemarking Machines. These latter machines are similar in concept to an earlier heavy duty Linemarking machine but contain detailed improvements and have a major additional facility of being able to paint edge lines on the right hand side of the road close against kerbs, medians, guardrails, etc.

Maintenance was 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.

A total of 15,529 road signs were manufactured.

All plant and motor vehicle repairs for the Metropolitan Construction Office together with a number of large plant repair jobs for other Works Offices were carried out during the year.

Three large vehicular ferries were overhauled at Mortlake Slipway and Central Workshop personnel assisted and supervised the overhaul of a further nine ferries throughout the State.

Steel handrails, totalling 6,950 feet in length were fabricated for a number of bridges.

A total of 1,568 tons of steel reinforcement was cut and bent to shape for use in concrete bridges and culverts throughout the State.

Sixty bitumen sprayers, owned by Contractors, Councils and the Department were tested during the year for the purpose of issuing or renewing Sprayer Certificates.

Steel girders were fabricated for the bridge over Raby Road on the South Western Expressway. This work included girders up to 103 feet long on which the butt welds were ultrasonically and radiographically tested.

Field Workshops

The Department's field workshops throughout the State numbered forty-two including three established during the year at Murwillumbah, St. Marys and Thornleigh.

The sixth stage of a Workshop Supervisors' Training Course was conducted at Granville for all foremen in charge of field workshops. The purpose of the course is to keep foremen informed of modern developments. The subjects included in this stage of the course were job instructions, bitumen spraying equipment, vehicle and plant braking systems and backhoe-loader hydraulic systems.

Plant Inspectors carried out regular inspections and assisted workshop personnel with plant repair problems.

With the assistance of teaching aids Plant Inspectors gave instruction to field personnel on new types of plant.

The campaign to increase the number of trade apprentices in the country was continued successfully and this year saw the introduction of the new trade of "Plant Mechanic". The Technical College is conducting the trade course for this trade on the Block Release System and all apprentices travel to Newcastle Technical College at regular periods throughout the year for their college instruction. The Block Release System has proved particularly effective for apprentices in the country and is much preferred over the former correspondence system which was necessary for apprentices in areas where it was not practical to travel to a Technical College for face to face classes.

INSTRUCTION IN PLANT MAINTENANCE AND OPERATION

The activities of the School of Plant Instruction were continued throughout the year.

The standard of plant operators is very satisfactory. The policy of training relief operators to be available in case of resignation or absence of the regular operators, has been continued, as well as the training of existing operators in respect of a wider variety of plant.

Over the year instruction was given on the following number of plant items of different types.

Graders	314
Tractors (Crawler)	150
Rollers	235
Tractors (Rubber tyred)	233
Loaders and Back-Hoes	157
Vehicles	62
Self-loading Scrapers	10
Snow Blowers	12
Miscellaneous	91

TOTAL: 1,264

RESEARCH AND MATERIALS TESTING

The Materials and Research Section, located in Head Office, was composed of the Materials and Research Engineer, the Principal Scientific Officer, two supervising engineers, two other engineers and five clerical officers. During the year another engineer was appointed to the Section temporarily to provide additional assistance.

There were a number of staff changes at the Materials and Research Laboratory at Milson's Point, including the appointment of an additional laboratory equipment officer. The position concerning engineering analysts deteriorated with only two replacements recruited for the two retirements and two resignations. At the end of the year the Laboratory was operated by the Engineer Manager, two supervising engineering analysts, four engineering analysts, a metallurgist, six laboratory equipment officers, 34 testing operators, a testing laboratory assistant, nine clerical officers and ten labourers.

In the Divisional Laboratories, apart from a number of changes in the testing operator force, three engineering analysts resigned, and at the end of the year there were 13 engineering analysts, 90 testing operators and about 50 labourers.

Divisional and Field Testing

In addition to the 16 Divisional Laboratories, 12 subsidiary laboratories were operated during the year, as well as a number of vehicles fitted as mobile units for field testing. A new laboratory at Waterfall was commissioned for the construction of the Southern Expressway and a small laboratory was operated for about three months at Jindabyne, for sampling and testing bituminous mixes being supplied for Main Road No. 286. A new concrete curing room was established at the Grafton Laboratory and portable concrete curing rooms were installed at the expressway laboratory sites.

The number of samples processed at Divisional and Field Laboratories during the year was 47,445. This involved about 220,000 tests, mostly on soils and gravels, although other materials such as bitumen, aggregates and concrete were tested also. Approximately 2,325 precast concrete culvert and bridge units were load tested and field control operations necessitated about 14,730 density-in-situ and 11,875 moisture content tests.

There was an increase in the amount of lime stabilisation work undertaken during the year and there were field trials of the foamed bitumen process. More use was made of the recently devised absorption test for determining the compatibility of primers and gravels and the Benkelman Beam was used on an increased scale for pavement overlay evaluation.

Materials and Research Laboratory

The reconstruction of the bitumen testing section was completed during the year and conditions for the chemical and paint testing were restored. In addition a soil stabilisation room was equipped and commissioned.

Alterations to the Laboratory annexe in McDougall Street at Milson's Point were completed, to accommodate the Soil Mechanics Section, staffed by a supervising engineer, an engineering analyst and a testing operator. The section was concerned mainly in foundation exploration work, including slope stabilities, drainage, embankment and abutment problems, seismic surveys, geological appraisals, etc. The capacity of the section increased during the year as new equipment was received.

The Metallurgical Section was equipped with a Universal camera microscope, metallurgical vibratory polishing machine, abrasive cut-off machine and a metallurgical specimen mounting press to complete the planned establishment. The class of work carried out mainly concerned the investigation of bridge steel of doubtful quality and weld samples from bridge structures under construction. Welding procedures were investigated with a view to general improvement in the quality of welds.

The total number of tests carried out by the Materials and Research Laboratory during the year was 79,565. The main materials processed were soils, gravels, aggregates, concrete, tar, bitumen, bituminous mixes, paints, steel and rubber bearings, together with other items such as retroreflective materials, adhesives, oils, water, bitumen additives and precoating materials, joint fillers, and masonry cleansing material.

Field services provided, other than those by the Soil Mechanics Section, included skid resistance measurements, Benkelman Beam deflection tests and a comprehensive checking system covering the installation, maintenance and calibration of equipment throughout the State.

Research

Research into the properties of fine crushed rock materials used for pavement construction in Sydney and nearby areas was continued and a test procedure involving the use of a wet and dry 10% Fines test was adopted for discrimination, between materials expected to perform satisfactorily and those prone to deteriorate rapidly in service. Further work was also carried out on the stabilisation of such materials and a specification was devised, requiring the inclusion of at least 2% of lime and a limit on the amount of pozzolanic material permissible.

The skid resistance research included two field trials of a fine textured bituminous surfacing. The aggregate was 3/16" crusher run river gravel and the binder was a 3.5:1 blend of bitumen and tar. This blend was designed to slowly degrade with oxidation, thus continually exposing new aggregate faces to traffic and maintaining a high level of skid resistance. The aggregate had a maximum size of 3/16", which from previous research, maintained a more random orientation than larger sized aggregate.

Laboratory work was carried out on the properties of high temperature coke oven tars and field trials of tar-aggregate mixes were commenced. Other field trials included the use of foamed bitumen premixed surfacings and foamed bitumen stabilisation of sandy materials.

A test vehicle was fitted with a prototype N.A.A.S.R.A. Roughness Meter and field investigations were commenced into its operation, calibration, evaluation and applications.

WIDENING OF METROPOLITAN MAIN ROADS

During the year land was acquired for the widening of the following roads in the County of Cumberland:—

State Highway No. 1 (Prince's Highway) between Heathcote and Waterfall in the Shire of Sutherland.

State Highway No. 2 (Hume Highway) in the City of Liverpool and Main Road No. 177 (Campbelltown Road) in the City of Campbelltown in conjunction with the South Western Expressway.

State Highway No. 5 (Great Western Highway) between Walters Road, Blacktown in the Municipality of Blacktown and Glossop Street, St. Mary's in the City of Penrith.

State Highway No. 5 (Great Western Highway) at Henry Street, Penrith in the Municipality of Penrith.

State Highway No. 5 (Great Western Highway) at Russell Street, Emu Plains in the City of Penrith in conjunction with the Western Expressway.

Main Road No. 162 (Lane Cove Road and Ryde Road) between Main Road No. 373 (Epping Road) in the Municipality of Ryde and State Highway No. 10 (Pacific Highway) in the Municipality of Ku-ring-gai.

Main Road No. 164 (Military Road and Spit Road) between Neutral Bay in the Municipality of North Sydney and The Spit in the Municipality of Mosman.

Main Road No. 164 (Barenjoey Road) between Mona Vale and Newport in the Shire of Warringah.

Main Road No. 315 (King George's Road) between Secondary Road No. 2041 (Stoney Creek Road) and Beverly Hills in the Municipality of Hurstville.

Main Road No. 315 (King George's Road) between Punchbowl Road and Main Road No. 167 (Canterbury Road) in the Municipality of Canterbury.

Main Road No. 315 (King George's Road) at the intersection with Main Road No. 167 (Canterbury Road) in the Municipality of Canterbury.

Main Road No. 315 (Punchbowl Road) at the intersection with King George's Road in the Municipality of Canterbury.

Main Road No. 315 (Punchbowl Road) between Cosgrove Road and Juno Parade in the Municipality of Strathfield.

PLANNING FOR DEVELOPMENT OF THE MAIN ROADS SYSTEM IN SYDNEY NEWCASTLE AND WOLLONGONG

Outline designs for new expressways and surface roads in the Main Roads Development Plan of the County of Cumberland, were reviewed for parts of the Southern and North-Western Expressways, the St. Ives-Dee Why route, the Johnstones Creek route between Rozelle and Enmore, the route between Marsfield and Turramurra, and the approaches to the new bridge over the Woronora River at Menai.

Widening schemes for roads that will eventually be added to the Main Roads System were investigated in the vicinity of Edgecliff, Newtown and Leichhardt.

Boundary revisions for a number of existing Main Roads throughout the County were investigated

During the year the Department made representations concerning the road proposals contained in eleven metropolitan planning schemes and held discussions with planning organisations in respect of five local planning projects.

The Department joined with six other Government authorities in the establishment of a transportation study for the Sydney area. The study is being financed 50% by the State Government and 10% each by the Departments of Main Roads, Railways, Government Transport, Motor Transport and the State Planning Authority.

Over 92,000 replies were made to written enquiries regarding the effect of proposed County Roads upon private properties.

Newcastle

Planning of the Main Roads System in the Northumberland County District continued during the year. Studies were in progress for the location of 29 miles of expressway and 14 miles of surface road in the Main Roads System. These new routes include the section of the Sydney-Newcastle Expressway between Wyong and Lake Macquarie, a 10 mile section of State Highway No. 23 and new locations for the New England Highway (State Highway No. 9) to avoid the built-up areas of Maitland and Beresfield and a route across Kooragang Island.

Boundary revision on 5½ miles of existing road was also undertaken.

Wollongong

The planned Main Roads System for the Wollongong-Port Kembla area was under continuing review. Road location studies involving 18 miles of expressway were in progress during the year.

Schemes for major improvements at two separate locations on the surface road system were investigated.

COUNTRY ROAD LOCATION, INVESTIGATION AND AERIAL PHOTOGRAPHY

Road location proposals were approved for a total of 123 route miles, involving 39 bridge sites during the year. Investigations were initiated or were proceeding on other projects covering a total length of 481 miles. Major projects included portions of the Sydney-Newcastle, South Western and Southern Expressways and an examination of the likely road requirements if a steelworks industry is established at Jervis Bay. Substantial progress was also made in planning for development of the Federal Highway between the Hume Highway south of Goulburn and the Australian Capital Territory.

Aerial photography is now almost always used in location investigations. A continuing programme of route photography along State Highways is aimed at covering the State about every ten years. During the year, route photography on State Highways and selected Trunk Roads totalled 1,053 miles. Special flood photography along the Darling River and other western rivers was obtained over a flying length of 786 miles and a further 80 miles was photographed for special projects.

Increasing use was made of colour films which allow the production of coloured prints or black and white prints as required. The use of colour is valuable in revealing details not otherwise apparent and allows greater accuracy in photogrammetric interpretation.

The Zeiss Stereometrograph was used extensively during the year, as was the flat bed plotter employed in conjunction with the Stereometrograph and the I.B.M. 1130 computer. A Wild PUG 4 point transfer device was purchased during the year following experience with one owned by the Department of Lands.

Expenditure on aerial photography and photogrammetry by outside bodies during the year totalled \$71,190. The value of photogrammetric projects completed by the Department and by the Department of Lands was \$39,438.

Research projects in hand included aerial triangulation of super wide angle photography development of a block adjustment programme, testing of ground control patterns on strips and blocks of photography, the use of colour diapositives on a stable base film, the production of black and white prints from colour transparencies via an internegative, and the development of computer programmes for plotting grids, control points and profiles from photogrammetric observations.

The Department's helicopter again proved its value for field investigation of route proposals.

ROAD TRAFFIC SURVEYS

Permanent and Semi-Permanent Stations

At the beginning of the year, traffic was being counted mechanically at 201 locations and, in addition, returns of traffic volumes at 15 ferry sites were being received. During the year the number of permanent and semi-permanent stations was increased to 315 while the number of ferry stations remained unchanged.

Following the opening, in 1970, of the Irrawang Bridge which replaced the ferry service on the Hunter River at Raymond Terrace, a permanent counting station was established at this site.

Divisional Traffic Volume Surveys

Detailed traffic volume surveys were completed in the Central Northern Division, Murray Darling Division, South Coast Division, Illawarra Division, Hunter Valley Division, Lower North Coast Division and North Eastern Division.

A detailed traffic volume survey of the County of Cumberland is in progress. It is more comprehensive than the 1968 County of Cumberland Survey, and covers all the proclaimed main roads in the County, all major streets in the Central Business District of Sydney, and Council roads which meet the requirements of the N.A.A.S.R.A. classifications of urban arterial roads and urban sub-arterial roads.

Special Purpose Traffic Surveys

Origin and Destination surveys were carried out at Tamworth and Coff's Harbour in order to assist investigations for planned road systems in these areas.

Research on Traffic Counts

Research on traffic counting techniques to improve the method, and reduce the cost of estimating annual average daily traffic volumes for urban areas has been completed. As a result of this research, the duration of counts at the short-count and semi-permanent stations has been reduced and the method of calculating annual average daily traffic volumes in the current traffic volume survey in the County of Cumberland has been improved. This research is being extended to include rural areas.

Computer Programmes

As a result of the changes made in traffic volume counting in the County of Cumberland Survey, computer programmes have been prepared and are being further developed to fully automate the processing and analysing of data.

Publication of Data

Data collected from the 1969 traffic volume surveys in the Southern, Central Western, Central Mountains Divisions and Gosford and Colo Shires were published in three separate volumes.

Preparation of traffic volume publications for four other Divisions is nearing completion.

Annual Average Daily Traffic Volume

Annual Average Daily Traffic Volumes obtained from permanent and semi-permanent counting stations for the calendar year 1970 are listed below. The corresponding volume for 1969 and the percentage changes in volume, where available, are also shown.

Local Government Area	Location	Annual Average Daily Traffic Volume		Percentage Change
<i>Sydney-Newcastle Expressway</i>		1969	1970	
Gosford	Hawkesbury River — Calga Tollway south of Mt. White	12,950	14,120	+ 9
Hornsby	Berowra — Hawkesbury River Tollway	12,070	13,210	+ 9
<i>North-South Arterial Road (West Wollongong Section)</i>				
Wollongong	Gipps Street Overbridge	18,690	20,460	+ 9
<i>Bradfield Highway</i>				
Sydney	Sydney Harbour Bridge	125,180	128,310	+ 3
<i>State Highway No. 1 — Princes Highway</i>				
Rockdale	Tempe — Bridge over Cook's River	51,030	50,090	- 2
Sutherland	Sylvania — Bridge over George's River	50,180	53,480	+ 7
Sutherland	Loftus — Railway Overbridge	21,640	23,620	+ 9
Wollongong	North of Main Road No. 513 (Mt. Ousley Road)	11,560	13,140	+14
Wollongong	Corrimal — North of Collins Street		18,910	
Wollongong	South of Smith Street	21,770	22,370	+ 3
Wollongong	Figtree — South of Gladstone Avenue		25,070	
Kiama	1 mile south of Post Office	5,450	5,695	+ 5
Eurobodalla	Bateman's Bay — Bridge over Clyde River	2,760	2,980	+ 8
Mumbulla	1 mile north of State Highway No. 4 (Snowy Mountains Highway)	1,000	1,060	+ 6
Imlay	Eden — 2 miles north of Post Office	1,150	1,380	+20
Imlay	Eden at old Road Creek	490	580	+18
Imlay	Eden — South of Quarantine Bay Road	860	1,010	+17
<i>State Highway No. 2 — Hume Highway</i>				
Ashfield	East of Bruce Street	23,280	21,500	- 8
Bankstown	Landsdowne — East of State Highway No. 13 (Woodville Road)	35,200	37,650	+ 7
Liverpool	Cross Roads — East of York Street	29,760	30,030	+ 1
Camden	Elderslie — East of Macarthur Road		12,645	
Mittagong	Mittagong — 2 miles north-east of Post Office	6,780	7,400	+ 9
Mulwaree	Yarra — West of State Highway No. 3 (Federal Highway)	3,020	3,430	+14
Goodradigbee	Yass — 4 miles west of Post Office	4,220	4,430	+ 5
Holbrook	Holbrook — 2 miles north of Post Office	2,240	2,530	+13
<i>State Highway No. 3 — Federal Highway</i>				
Mulwaree	Yarra — South of State Highway No. 2 (Hume Highway)	2,780	2,740	- 1
<i>State Highway No. 4</i>				
Mumbulla	West of State Highway No. 1 (Princes Highway)	720	580	- 19
Snowy River	East of Main Road No. 286 (Cooma-Berridale Road)	1,880	2,080	+11
Snowy River	Adaminaby — 0.8 miles west of Rosedale Road	640	590	- 8
<i>State Highway No. 5 — Great Western Highway</i>				
Ashfield	East of Dalhousie Street	38,990	40,280	+ 3

Local Government Area	Location	Annual Average Daily Traffic Volume		Percentage Change
		1969	1970	
State Highway No. 5 – Great Western Highway (cont)				
Parramatta	Clyde – Railway Level Crossing	47,270	50,760	+ 7
Blacktown	Wallgrove – Bridge over Eastern Creek	23,730	27,990	+18
Penrith	Bridge over Nepean River	15,880	18,330	+15
Turon	West of Blaxland Shire Boundary	3,020	3,260	+ 8
State Highway No. 6 – Mid Western Highway				
Waugoola	Cowra – Bridge over Waugoola Creek	1,670	1,720	+ 3
Weddin	Marsden – east of State Highway No. 17 (Newell Highway)	290	360	+24
Bland	Wyalong – East of Trunk Road No. 57 (Temora Road)	1,250	1,290	+ 3
Hay	Hay – 20 miles east of Post Office	540	520	- 4
State Highway No. 7 – Mitchell Highway				
Canobolas	Orange – 1.5 miles east of Main Road No. 245 (Piesle Street)	3,520	3,890	+11
Canobolas	Orange – 3 miles north of Post Office	1,660	1,750	+ 5
Talbragar	Dubbo – 1.2 miles east of East Dubbo level crossing	2,380	2,070	- 13
Darling	Bourke – 5 miles south of Post Office	220	200	- 9
State Highway No. 8 – Barrier Highway				
Cobar	East of Trunk Road No. 61 (Orange-Cobar Road)	360	390	+ 8
Western Division	Broken Hill – 5 miles east of Post Office		480	
Western Division	Broken Hill – 8 miles west of Post Office		390	
State Highway No. 9 – New England Highway				
Patrick Plains	2.9 miles east of Main Road No. 128 (Singleton-Gostwyck Road)	3,840	4,110	+ 7
Maitland	East Maitland at Wallis Creek Bridge		19,610	
Peel	Tamworth – 3.4 miles south of Post Office	1,740	1,860	+ 7
Cockburn	Tamworth – 0.6 miles north of Main Road No. 105 (Nemingha-Scone Road)	3,400	3,460	+ 2
Severn	Glen Innes – south of Glen Innes Municipal Boundary	2,570	2,050	- 20
State Highway No. 10 – Pacific Highway				
Hornsby	Waitara – north of State Highway No. 13 (Pennant Hills Road)	27,070	28,790	+ 6
Hornsby	Berowra – north of Tollway Gates	4,360	4,780	+10
Hornsby	Brooklyn – Bridge over Hawkesbury River	15,820	16,850	+ 7
Gosford	Mt. White	2,100	2,350	+12
Lake Macquarie	Swansea – 2 miles south of bridge over entrance to Lake Macquarie	8,690	9,130	+ 5
Lake Macquarie	Charlestown – south of Smart Street	32,550	32,340	- 1
Newcastle	Tighes Hill – south of Ingall Street		25,500	
Newcastle	Hexham – Bridge over Hunter River	11,360	12,060	+ 6
Port Stephens	Karuah – Bridge over Karuah River	3,700	3,890	+ 5
Stroud	Bulahdelah – north of Main Road No. 110 (Stroud Road)		3,700	
Manning	Nabiac – Bridge over Woolomba River	3,000	3,180	+ 6
Hastings	Bridge over Hastings River	2,600	2,810	+ 8
Nambucca	Macksville – 1 mile north of Scotts Road	2,910	3,240	+11
Bellingen	Raleigh – 1 mile north of Bellingen River Bridge		3,560	
Ullmarra	South Grafton – south of Developmental Road No. 1253 (Grafton By-Pass Road)	2,320	2,350	+ 1
Maclean	Harwood – Bridge over Clarence River	2,570	2,890	+12
Tintenbar	Ballina – south of State Highway No. 16 (Bruxner Highway)	2,360	2,580	+ 9
Byron	Brunswick Heads – 1 mile south of Post Office		4,030	
Tweed	Tweed Heads South – south of Drydock Road	9,620	10,420	+ 8
State Highway No. 11 – Oxley Highway				
Hastings	Port Macquarie – 0.3 miles east of State Highway No. 10 (Pacific Highway)		1,950	
Hastings	Wauchope – 1.6 miles west of Beechwood Road	780	790	+ 1
Peel	Tamworth – 5 miles west of Main Road No. 130 (Tamworth-Werris Creek Road)	1,430	1,500	+ 5
State Highway No. 12 – Gwydir Highway				
Severn	Gibraltar Range Tick Gate	370	390	+ 5
Booolooroo	Moree – 2 miles east of Post Office	1,000	930	- 7
State Highway No. 13 – Woodville Road, Church Street and Pennant Hills Road				
Fairfield	Villawood – north of State Highway No. 2 (Hume Highway)	23,460	27,010	+15
State Highway No. 14 – Sturt Highway				
Kyeamba	0.3 miles east of Main Road No. 384 (Alfred Town - Kyeamba Road)	1,140	1,320	+16
Hay	Hay at Bungah Creek Bridge	880	880	0

Local Government Area	Location	Annual Average Daily Traffic Volume		Percentage Change
		1969	1970	
<i>State Highway No. 14 – Sturt Highway (cont)</i>				
Wentworth	Buronga – 12 miles east of State Highway No. 22 (Silver City Highway)	960	1,010	+ 5
<i>State Highway No. 15 – Barton Highway</i>				
Goodradigbee	Yass – south of State Highway No. 2 (Hume Highway)	1,840	2,150	+17
<i>State Highway No. 16 – Bruxner Highway</i>				
Tintenbar	Ballina – 2 miles west of State Highway No. 10 (Pacific Highway)	1,790	1,910	+ 7
Gundurimba	McKee's Hill Post Office	1,840	2,010	+ 9
Casino	Casino – at Tomki Shire Boundary		1,390	
Tenterfield	West of State Highway No. 9 (New England Highway)	220	220	0
<i>State Highway No. 17 – Newell Highway</i>				
Boooroo	Camurra – Railway Level crossing No. 209	700	760	+ 9
Talbragar	Dubbo – 2 miles north of Post Office	2,960	3,000	+ 1
Goobang	2.1 miles north of Post Office	1,360	1,360	0
Narrandera	2 miles east of Post Office	1,120	1,130	+ 1
Berrigan	Finley – 2 miles south of Post Office	1,290	1,560	+21
<i>State Highway No. 18 – Castlereagh Highway</i>				
Coonamble	2 miles south of Post Office	570	600	+ 5
<i>State Highway No. 19 – Monaro Highway</i>				
Monaro	Bunyan – Bridge over Cooma Creek	1,340	1,470	+10
Monaro	Nimmitabel – 1 mile north of Post Office	770	820	+ 6
Bombala	0.5 miles north of Iris Street	440	510	+16
<i>State Highway No. 20 – Riverina Highway</i>				
Hume	Albury – 4 miles west of Post Office	930	970	+ 4
Deniliquin	1 mile east of Main Road No. 552 (Deniliquin-Jerilderie Road)	970	1,050	+ 8
<i>State Highway No. 21 – Cobb Highway</i>				
Murray	Deniliquin – 2 miles south of Post Office	830	910	+10
<i>State Highway No. 22 – Silver City Highway</i>				
Broken Hill	8 miles south of Post Office	220	220	0
<i>State Highway No. 24 – Mount Lindesay Highway</i>				
Kyogle	Woodenbong – 0.2 miles Main Road No. 361 (Bonaldi Road)		710	
<i>State Highway No. 25 – Illawarra Highway</i>				
Shellharbour	Macquarie Pass	1,480	1,500	+ 1
<i>State Highway No. 26 – Calga – Peat's Ridge – Ourimbah</i>				
Gosford	Peat's Ridge at Post Office	9,920	10,390	+ 5
<i>Trunk Road No. 51 – Bateman's Bay – Canberra</i>				
Eurobodalla	Nelligen – Bridge over Clyde River	930	950	+ 2
<i>Trunk Road No. 55 – Marrangaroo – Mullaley</i>				
Cudgegong	Mudgee – 0.5 miles south of railway level crossing	1,230	1,290	+ 5
<i>Trunk Road No. 61 – Orange – Cobar</i>				
Canobolas	Orange – at Canobolas Shire boundary	1,550	1,620	+ 5
<i>Trunk Road No. 65 – Ewingsdale – Lismore</i>				
Bangalow	0.3 miles west of State Highway No. 10 (Pacific Highway)	1,400	1,450	+ 4
<i>Trunk Road No. 66 – Broken Hill – Menindee</i>				
Western Division	Broken Hill – 5 miles east of Post Office		310	
<i>Trunk Road No. 68 – Renmark – Mungindi</i>				
Darling	Bourke – 4 miles east of Post Office		110	
Wentworth	Wentworth – 10 miles west of Post Office		80	
<i>Trunk Road No. 74 – Armidale – South Grafton</i>				
Ulmarra	South Grafton – south of Main Road No. 151 (Grafton-Coffs Harbour Road)	460	480	+ 4
<i>Trunk Road No. 76 – Raleigh – Ebor</i>				
Fernmount	3.8 miles west of State Highway No. 10 (Pacific Highway)	1,390	1,540	+11
<i>Trunk Road No. 78 – Olympic Way</i>				
Mitchell	Wagga Wagga – 1 mile north of Main Road No. 240 (Coolamon Road)	1,660	1,720	+ 4

Local Government Area	Location	Annual Average Daily Traffic Volume		Percentage Change
		1969	1970	
Trunk Road No. 83 – Grafton – Woodenborg				
Grafton	Bridge over Clarence River	12,370	13,050	+ 5
Copmanhurst	Koolkhan – 0.3 miles south of Main Road No. 150 (Koolkhan-Woodenborg Road)	940	970	+ 3
Kyogle	Kyogle – 0.5 miles south of Highfield Road	1,390	1,430	+ 3
Trunk Road No. 90 – Stroud – Taree				
Stroud	Weismantles – south of Main Road No. 101 (Dingaree Road)		460	
Trunk Road No. 91 – Pambula – Bombala				
Imlay	Pambula – 1.4 miles west of State Highway No. 1 (Princes Highway)		230	
Main Road No. 108 – Adamstown – Newcastle – Stockton – Nelson Bay				
Newcastle	Broadmeadow – south-west of Samdon Street	28,210	28,430	+ 1
Newcastle	Stockton – Ferry over Hunter River	3,939	4,060	+ 3
Port Stephens	Williamstown – 0.2 miles north of Main Road No. 302 (Hexham Road)		4,710	
Main Road No. 111 – Boolambayte – Tuncurry				
Stroud	Forster at Wallis Lake Bridge		5,470	
Main Road No. 112 – Wingham – Oxley Highway				
Manning	North of Cedar Party Creek		230	
Main Road No. 142 – Lismore – Murwillumbah				
Terania	Nimbin – 0.8 miles north of Main Road No. 141A (Nimbin Road)		580	
Main Road No. 145 – Woodburn – Coraki				
Woodburn	At Bungawalbin Post Office		1,020	
Main Road No. 147 – Woodburn – Lismore				
Woodburn	Ferry over Richmond River	202	220	+ 9
Main Road No. 149 – Casino – Coraki – Buckendoon				
Woodburn	Coraki – Ferry over Richmond River	161	160	- 1
Main Road No. 150 – Koolkhan – Tabulam				
Copmanhurst	East of Copmanhurst Post Office		210	
Main Road No. 152 – Lawrence – Yamba				
Maclean	Bluff Point – Ferry over Clarence River	120	110	- 8
Main Road No. 162 – Mona Vale Road				
Ryde	North Ryde – De Burgh's Bridge over Lane Cove River	23,720	25,980	+10
Ku-ring-gai	Pymble – north of Orana Avenue	15,600	16,400	+ 5
Main Road No. 164 – Spit Road				
Manly	The Spit – Bridge over Middle Harbour	46,290	47,870	+ 3
Main Road No. 165 – Victoria Road				
Leichhardt	Glebe Island – Bridge over Johnston's Bay	45,570	51,510	+13
Drummoyne	Gladesville – Bridge over Parramatta River	64,290	67,660	+ 5
Main Road No. 166 – Huntley's Point – Lane Cove				
Hunter's Hill	Bridge over Tarban Creek	34,750	36,660	+ 5
Lane Cove	Figtree Bridge over Lane Cove River	33,640	36,480	+ 8
Main Road No. 167 – Canterbury Road – Newbridge Road				
Canterbury	Wiley Park – east of Canary Road	33,540	33,910	+ 1
Bankstown	Milperra – Bridge over George's River	32,260	35,730	+ 11
Main Road No. 168 – Forest Road				
Sutherland	Lugarno – Ferry over George's River	1,539	1,600	+ 4
Main Road No. 172 – Oxford Street				
Woollahra	Woollahra – west of Ocean Street	37,840	40,450	+ 7
Main Road No. 177 – Appin Road				
Campbelltown	Campbelltown – 0.5 miles north of Post Office	9,090	9,330	+ 3
Main Road No. 178 – Camden Road				
Campbelltown	Campbelltown – west of Main Road No. 177 (Appin Road)		8,150	
Main Road No. 179 – Menangle Road				
Wollondilly	Maldon – railway level crossing	1,490	1,755	+18
Main Road No. 181 – McGrath's Hill – Singleton				
Baulkham Hills	Webb's Creek – Ferry over Hawkesbury River	140	140	
Main Road No. 182 – Windsor – Sackville Reach				
Baulkham Hills	Sackville Reach – Ferry over Hawkesbury River	223	230	+ 3

Local Government Area	Location	Annual Average Daily Traffic Volume		Percentage Change
		1969	1970	
Main Road No. 185 — Lawrence Hargrave Drive				
Wollongong	Blue Gum Forest — east of State Highway No. 1 (Princes Highway)		1,680	
Wollongong	Thirroul — south of Raymond Road		11,730	
Main Road No. 186 — Mount Keira Road				
Wollongong	West Wollongong — east of Robson's Road	9,975	9,300	- 7
Main Road No. 188 — Newcastle — Adamstown — Waratah West				
Newcastle	Glebe — west of Henry Street		12,830	
Newcastle	Waratah — Maud Street north of Main Road No. 188		13,480	
Main Road No. 194 — General Holmes Drive				
Botany	1.3 miles east of Bridge over Cook's River	56,510	60,080	+ 6
Main Road No. 198 — Kempsey — South West Rocks				
Kempsey	Kempsey — Washington Street north of Sullivan Street		1,460	
Main Road No. 199 — Rocky Point Road — Taren Point Road				
Sutherland	Captain Cook Bridge over George's River	37,070	39,740	+ 7
Main Road No. 200 — Concord Road				
Ryde	Uhrs Point — Bridge over Parramatta River	38,920	40,710	+ 5
Main Road No. 209 — Muswellbrook — Merriwa				
Muswellbrook	Denman — 0.7 miles north of Post Office		890	
Main Road No. 217 — Wyong — Birmingham Gardens				
Lake Macquarie	Boolaroo — north of First Street	12,460	13,940	+12
Main Road No. 218 — Wollombi — West Maitland				
Cessnock	Wollombi — 2 miles east of Main Road No. 181 (Singleton Road)		260	
Cessnock	Neath — at level crossing 488 P		6,550	
Main Road No. 220 — Toronto — Brunkerville — Cessnock — Glendonbrook				
Cessnock	At Brunkerville Post Office	2,730	2,980	+ 9
Main Road No. 223 — West Wallsend — Kurri Kurri				
Newcastle	New Lambton Heights — north of Ridgeway Road	17,560	18,319	+ 4
Cessnock	Buchanan — west of Wallis Creek Bridge		5,600	
Main Road No. 225 — Wiseman's Ferry — Central Mangrove				
Baulkham Hills	Wiseman's Ferry — Ferry over Hawkesbury River	376	410	+ 9
Main Road No. 259 — Camden — Burragorang				
Camden	Camden — south of Barsden Street		5,010	
Main Road No. 261 — Moss Vale — Bomaderry				
Wingecarribee	Fitzroy Falls - north of Post Office	590	640	+ 8
Main Road No. 264 — Kiama — Robertson				
Kiama	Kiama — west of Dido Street		820	
Main Road No. 272 — Tilba — Tilba — Bega				
Mumbulla	Bermagui — south of Paraboon Street		390	
Main Road No. 275 — Candelo — Cathcart				
Imlay	Candelo — west of Candelo Creek Bridge		250	
Main Road No. 286 — Mount Kosciuszko Road				
Snowy River	Jindabyne — 10 miles north-west of Post Office	730	760	+ 4
Main Road No. 295 — Five Islands Road				
Wollongong	Cringilla — east of Main Road No. 568 (Springhill Road)	33,160	31,600	- 5
Main Road No. 309 — Rydalmere Avenue — Aston Street				
Parramatta	Camellia — south of River Road	18,810	21,090	+12
Main Road No. 312 — Falls Creek — Huskisson				
Shoalhaven	Falls Creek - east of State Highway No. 1 (Princes Highway)		1,770	
Main Road No. 316 — Mayfield West — Wickham				
Newcastle	Wickham — Hannell Street north of Greenway Street		16,040	
Main Road No. 325 — Woomera — Charlestown — Warners Bay				
Lake Macquarie	Redhead — Dudley Road North of Collier Street		3,480	
Lake Macquarie	Mount Hutton — Warners Bay Road south of Wilsons Road		3,380	
Main Road No. 326 — Adamstown Heights — Mayfield North				
Newcastle	Waratah — Turton Road north of Kahibah Road		16,570	
Main Road No. 328 — Warringah Road				
Warringah	Forestville — west of Melwood Avenue	40,490	42,200	+ 4

Local Government Area	Location	Annual Average Daily Traffic Volume		Percentage Change
		1969	1970	
<i>Main Road No. 332 – Berowra Waters Road</i>				
Hornsby	Berowra Waters – Ferry Berowra Creek	206	240	+17
<i>Main Road No. 335 – Tuggerah – Norahville</i>				
Wyong	The Entrance – north of Shelley Beach Road		10,500	
<i>Main Road No. 336 – Gosford – The Entrance</i>				
Gosford	0.2 miles east of Russell Street	13,200	14,820	+12
<i>Main Road No. 373 – Epping Road</i>				
Hornsby	Epping – Bridge over Terry's Creek	22,650	23,770	+ 5
<i>Main Road No. 412 – Cobar – Bourke</i>				
Cobar	Cobar – 5 miles north of State Highway No. 8 (Barrier Highway)		80	
<i>Main Road No. 503 – Wilberforce – Singleton</i>				
Patrick Plains	Howes Valley – 3.5 miles north of Post Office	1,010	970	- 4
<i>Main Road No. 513 – Mount Ousley Road</i>				
Wollongong	Mount Ousley – 0.2 miles west of Wollongong By-Pass		12,190	
<i>Main Road No. 522 – Port Kembla – Shellharbour</i>				
Wollongong	Primbee – 0.4 miles of Nicolle Road		19,680	
Wollongong	Windang – at Lake Illawarra Bridge		19,770	
<i>Main Road No. 527 – Belmont – Cardiff</i>				
Lake Macquarie	North Belmont – north of Belmont Crescent		6,790	
<i>Main Road No. 532 – Silverwater Road</i>				
Parramatta	Silverwater – Bridge over Parramatta River	26,960	28,720	+ 7
<i>Main Road No. 556 – Gladstone – Smithtown – Seven Oaks</i>				
Macleay	Smithtown – ferry over Macleay River	447	400	-11
<i>Main Road No. 568 – Keira Street – Springhill Road</i>				
Wollongong	Wollongong – south of Crown Street		9,220	
<i>Main Road No. 571 – Gerringong – Gerroa.</i>				
Kiama	Gerringong – 0.5 miles south of Post Office	1,570	1,980	+26
<i>Main Road No. 575 – Wauchope – Telegraph Point</i>				
Hastings	Telegraph Point – 0.2 miles west of State Highway No. 10 (Pacific Highway)		210	
<i>Main Road No. 581 – North Wollongong – Coniston</i>				
Wollongong	North of Main Road No. 582 (Crown Street)	11,070	11,030	0
<i>Main Road No. 582 – Crown Street</i>				
Wollongong	West of Main Road No. 581 (Corrimal Street)	12,140	13,090	+ 8
<i>Other than Main Roads</i>				
Concord	Mortlake – Ferry over Parramatta River	253	240	- 5
Sydney	Pymont – Bridge over Darling Harbour	47,890	49,940	+ 4
Wakool	Speewa – Ferry over Murray River	51	50	- 2
Ulmarra	Ulmarra – ferry over Clarence River	38	40	+ 5

EMPLOYMENT AND INDUSTRIAL

The number of wages employees (including contractors' employees and contract lorry owner-drivers) engaged on maintenance and construction of Main Roads and construction of Developmental Roads by the Department of Main Roads and Councils at 30th June, 1971, was 11,419 compared with 11,651 at 30th June, 1970. In addition, there were 3,534 salaried officers of the Department. The following table provides a detailed analysis of these figures.

Departmental Employees

Salaried Officers - Male	2,986	
- Female	<u>548</u>	3,534
Wages Employees - Male	6,002	
- Female	<u>57</u>	<u>6,059</u>
TOTAL:		9,593

Departmental Contracts

Contractors' employees engaged on contracts under direct supervision by Department (other than haulage and minor contracts)	274	
Haulage Contracts - Trucks	856	
Minor Contracts - Plant etc.	<u>473</u>	1,603
Council Employees engaged on Subsidised Roadworks		2,833
Council Owned and Contract Trucks engaged on Subsidised Roadworks		<u>924</u>
TOTAL:		<u>14,953</u>

No major industrial dispute occurred during the year.

OFFICE PREMISES AND HOUSING FOR STAFF

Several Head Office Sections were relocated during the year to improve conditions and effect a more efficient allocation of space. A contract was let for the amplification of the air conditioning system in parts of the Head Office complex.

A new front entrance was constructed to the Metropolitan Divisional Office and the ground floor was remodelled to improve conditions and office accommodation for the staff.

Plans for the invitation of tenders for a new Divisional Office in Glen Innes were prepared by a firm of Consulting Architects from a layout prepared by the Department. Preliminary layouts were also prepared for a new Divisional Office in Lithgow.

Plans were also prepared for alterations and additions to the Divisional Office at Bourke for the conversion of the existing garages for use as a conference room and the construction of new garages. Tenders were invited for extensions to the Testing Laboratory at Tamworth. A property adjoining the Wollongong Divisional Office was purchased and converted for use by Surveyors attached to the Division. A property for similar purposes has also been purchased adjoining the Divisional Office in Parkes.

An additional house was erected at Wilcannia for staff accommodation and contracts let for additions to staff cottages in Lithgow and Goulburn.

Construction of the new Works Office at Thornleigh was completed together with new workshops and outbuildings at Murwillumbah and Windsor.

Tenders were invited for the completion of the Bowenfels Works Office and a new Works Office at Singleton. A contract was let for the construction of a new Works Office and Nursery at Yennora and a layout approved for the new Works Office to be erected at Lane Cove.

Alterations and extensions to the Works Offices at Hay and Ballina have been planned together with the establishment of a new Works Office at Tenterfield.

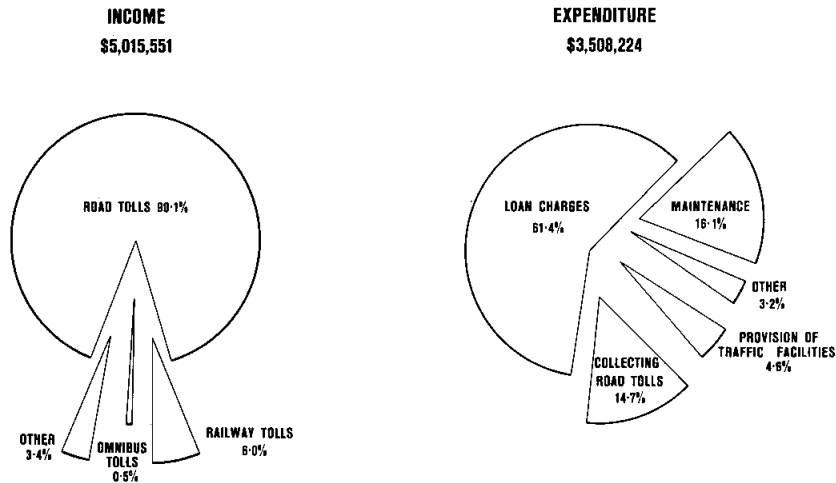
SYDNEY HARBOUR BRIDGE

Financial Position

The toll income of the Bridge amounted to \$5,015,551 which exceeded the previous year's level by \$10,587. Expenditure totalled \$3,508,224 which was \$211,984 less than in 1969-70. The introduction of one-way toll collection in July, 1970, accounted for a slight decline in income from road tolls, but, despite increased salary and wage rates this was more than offset by reductions in the cost of collection.

Appropriation from the Sydney Harbour Bridge Account for construction of the Warringah Expressway approach to the Sydney Harbour Bridge and the Cahill Expressway amounted to \$45,572 and \$24,317 respectively.

The sources of income and the main items of expenditure are shown in the diagram below:—



Traffic

The approximate number of private road vehicles which crossed the Bridge during the year totalled 48.3 million, consisting of 23.3 million southbound and 25 million northbound vehicles. In addition, approximately 39 million passengers crossed the Bridge by rail (27.3 million) and by omnibus (11.7 million)

The revenue received from the users of each class of transport was as follows:—

Particulars	Toll Collections \$	Total Toll Collected %
Road Vehicles (excluding omnibus and exempt vehicles)	4,518,708	93.27
Railway Passengers	299,992	6.19
Omnibus Passengers	26,151	0.54

The annual average daily traffic volume on the Sydney Harbour Bridge increased by three per cent to 128,860 vehicles per day. During May, the average Monday traffic volume increased by 3.4% to 138,050 vehicles per day, and the average Friday traffic volume increased by 5.4% to 152,180 vehicles per day, indicating a more rapid growth of daily volume on Fridays than on any other weekday.

For three successive years, the highest daily traffic volume was recorded on the eve of the Easter Public Holidays. This figure increased by approximately 1% to 160,620 vehicles in 1971.

The average peak-hour traffic volume in the direction of major flow was 10,360 vehicles per hour for the six south-bound lanes in the morning peak period, and was 9,320 vehicles per hour for the six northbound lanes in the evening peak period. This represents a decrease of 3.5% in the morning peak-hour volume and an increase of 2% in the evening peak-hour volume.

In the direction of minor flow, the average peak hour traffic volume for the morning peak period increased by 4.5% to 3,040 vehicles per hour, and the evening peak period increased by 4.1% to 3,330 vehicles per hour.

During the year 3,312 vehicles were removed from the Sydney Harbour Bridge, Cahill Expressway and the Warringah Expressway by the Department's tow-truck organisation. This was 307 vehicles fewer than the number removed in the previous year.

Details of breakdowns are shown in the following table

*Breakdowns on Sydney Harbour Bridge,
Cahill Expressway and Warringah Expressway,
between 6.30 a.m. and 6.30 p.m.
1st July, 1970 to 30th June, 1971.*

Cause of Breakdown	Week Days	Weekends and Public Holidays	Total	Percentage
Lack of Petrol	1031	163	1194	36
Mechanical Breakdown	1395	200	1595	48
Flat Tyres	308	68	376	12
Accidents	120	15	135	4
Abandoned	12	0	12	0
Total:	2866	446	3312	100

Maintenance

The fourth repainting of the Sydney Harbour Bridge is nearing completion and the fifth repainting cycle was commenced during the year. An area of 580,000 square yards, equal to the total of steel to be painted, was completed in October, 1970. However some areas of steelwork require painting two or three times during a repainting cycle, and the total area painted during the fourth cycle is now 630,500 square yards, with approximately 100,000 square yards still to be painted.

Routine inspection and maintenance of steelwork, cranes, lifts, etc., was carried out and rivet testing on the eastern truss of the Main Arch is almost completed.

Maintenance of power supply, lighting, and electrical equipment continued throughout the year, and work was commenced on a trial installation of closed circuit television for traffic surveillance.

Introduction of One-Way Toll Collection on the Sydney Harbour Bridge

The one-way toll collection system on the Sydney Harbour Bridge came into operation at midnight on Saturday, 4th July, 1970. Since then, tolls have been collected only from southbound traffic. The new toll charges for southbound traffic are double the old rates except for solo motor cycles, motor scooters and horse drawn vehicles which now pay five cents instead of two cents.

Traffic

Northbound non-paying traffic increased from a daily average of 65,261 vehicles (50.7 percent of total traffic) to 68,529 (51.8 percent) during 1970-71 the first full year of the one-way toll collection system. Southbound traffic, was 63,766 vehicles (48.2 percent) compared with 63,383 vehicles (49.3 percent of total traffic) in the previous year, a decrease of 1.1 percent.

Road Toll Collections

During the first year's operation of the one-way toll system, road toll collections dropped by \$30,428 (0.67 percent).

Cost of Toll Collections

Toll collection costs under the one-way toll system totalled \$516,000 in 1970/71 compared with \$635,000 in 1969/70, a reduction of \$119,000. This saving was achieved despite substantial increases in wage rates of toll collection personnel and was brought about by a reduction in personnel required to operate the toll barriers.

REGULATION OF WEIGHT OF LOADS ON MAIN ROADS

Ordinance No. 30C of the Local Government Act, 1919 prescribes limits for the gross loads and individual axle loads imposed on road pavements and structures and on ferry vessels by vehicles using Main Roads.

The following statement summarises action taken during the year in the administration of the Ordinance. Figures for the year ended 30th June, 1970 are also shown.

	<u>1970/71</u>	<u>1969/70</u>
Vehicles stopped for checking	46,938	43,729
Vehicles reported as overloaded	9,824	7,960
Drivers prosecuted for failure to obey a lawful direction	74	89
Notices of overloading issued (Notices of overloading represent the number of cases in which warning notices only are sent to both the owner and driver but no prosecution action is taken)	1,017	834
Prosecutions authorised	6,953	6,242

Number of cases heard by Courts	8,405	7,772
Number of convictions recorded	5,913	5,613
Total penalties imposed	\$274,526.	\$251,700.17
Maximum penalty (\$400)	Nil	1
Average penalty including all costs required to be met by the defendant per case.	\$45.50	\$44.48

Of the total number of vehicles stopped, 9,824 or 20.9 per cent were found to be loaded in excess of Ordinance limits. This represents an increase of 24.5 per cent or 1,864 vehicles on the number of overloaded vehicles since 1969/70.

The following table summarises the extent of overloading during the year:—

Weight Overloaded	0 - 10 Cwt	10 - 20 Cwt	Over 20 Cwt	Over 40 Cwt	Over 60 Cwt
No. of Vehicles reported	1700	2995	3012	1161	956
(i) Vehicles travelling Interstate	858	1130	1021	370	310
(ii) Vehicles travelling Intrastate	842	1865	1991	791	646

During the year five off-road weighing sites were provided at:—

- 1) 37 miles north of Windsor on the Putty Road (Main Road No. 503).
- 2) 3 2/10 miles south of the bridge near Burrill Lakes on the Princes Highway (State Highway No. 1).
- 3) the tick gates 14 miles south of Grafton on the Pacific Highway (State Highway No. 10).
- 4) Quarry Hill 2 miles south of Murwillumbah on the Pacific Highway (State Highway No. 10).
- 5) 2½ miles north of Glen Innes on the New England Highway (State Highway No. 9).

These sites are adjacent to the roadway and provide heavy duty and all weather sites for weighing heavy vehicles on portable Hi-Way Loadometer weighing devices.

Modifications were carried out to the Department's Weighbridge at Hexham which involved the dismantling and movement of the Department's Gosford Weighbridge to Hexham for coupling with the existing weighbridge to form a two plate combine weighbridge.

Early in 1971 construction was commenced on a new weighbridge installation on State Highway No. 9 (New England Highway) near Kankool.

During the year Departmental Inspectors assisted with the Commonwealth wide NAASRA Axle Surveys. In New South Wales, these surveys were carried out in July/August, 1970 and April/May, 1971. These surveys not only recorded axle loads but also vehicle, body and engine types, tare and gross weights, vehicle and load dimensions, etc.

To assist drivers of heavy vehicles to stop safely when required to do so for a weight check, a sign advising of "Truck Inspectors Ahead" was introduced during the year. This sign is placed on the roadway on the approach to sites where Inspectors are permanently checking and allows the driver to commence slowing down before actually being signalled to do so by the "Stop" bat held by the Inspectors.

The installation of new plant for heavy industry and the movement of large plant items resulted in 6,425 applications for permits to transport non-divisible loads with axle and gross weights in excess of Ordinance limits.

Permits to exceed Ordinance limits are issued only for non-divisible loads and then only if transportation by rail or sea is not practicable. These permits are divided into two categories.

"A" Class or Special Permits which are issued as a result of an individual application for a single journey on a specified date. During the year 5,690 such permits were issued involving the movement of 306,426 tons compared with the issue of 5,441 permits involving 291,353 tons during the previous year.

Included in the Special Permits issued this year were 175 loads in excess of 75 tons each, the heaviest being the transportation of a 198T/Stator, with a gross load of 262 tons. This Stator travelled from Darling Harbour to Cooks River then after rail movement, from Ravensworth to Liddell Power Station.

"B" Class or Period Permits, which are issued for a specified period varying from three to twelve months. Period Permits provide for lesser weights than those allowed by Special Permits and the majority apply to travel by mobile cranes. These permits are issued for travel within a restricted area, generally 30 to 50 miles of a given point. Motor vehicles used for the transportation of these loads must be fitted with axle arrangements specially placed to spread the weight of the load. Other factors taken into consideration are the route to be travelled and the ability of the structures on the nominated route to support the weight of the load. During the year 560 Period Permits were issued compared with 425 issued during the previous year.

The Department continued to supply information regarding application of Ordinance limits to particular types of vehicles. Assessment of the carrying capacity of vehicles were issued on the application by owners, and, together with "Guide to Load Limits under Ordinance No. 30C" — Departmental Form No. 11 — were in constant demand throughout the year. The bulk of these enquiries from operators, manufacturers and transport interests generally referred to the Department's amendment to the Ordinance covering the gross weight of six or more axled vehicles. It is anticipated that this amendment will be gazetted during August or September, 1971.

NATIONAL ASSOCIATION OF AUSTRALIAN STATE ROAD AUTHORITIES

The National Association of Australian State Road Authorities is an organisation of the Principal Road Authorities in the six States together with the Commonwealth Department of Works which is the road constructing authority for the Commonwealth Territories. The respective Executive Heads of these authorities comprise the membership of the Association.

The Association, which was established in 1934, serves to provide a means of pooling technical and administrative experiences; of inaugurating, co-ordinating and rationalising road research projects; of harmonising and co-ordinating standards; of ascertaining and publishing the facts about Australia's principal roads and their financing; and of developing an informed outlook on Australia's road problems.

The technical work of the Association is developed by the Principal Technical Committee, comprising the Chief Engineers of the various Authorities. The Principal Technical Committee is assisted by specialist committees of officers from the State Road Authorities experienced in Materials Research, Traffic Engineering, Bridge Engineering, Advance Planning, Plant and Equipment, Computers, Geometric Road Design and Construction and Maintenance Practice.

A Secretarial and Accounts Committee comprising the Secretaries and Accountants of the various State Road Authorities and the Commonwealth Department of Works assists the Association in administrative and management practices.

The Engineer-Secretary, assisted by a small staff, carries out the secretarial work of the Association. The Secretariat, for the time being, is located at the Department of Main Roads, New South Wales, and each of the Member Authorities contribute towards the cost of its operation.

Four meetings of the Association were held during the year. The Forty-second Meeting was held in August, 1970 at Canberra and the Forty-third, Forty-fourth, and Forty-fifth Meetings were held at Melbourne in November, 1970, December, 1970, and May, 1971, respectively.

During the year there have been nine meetings of the Specialist Committee and two meetings of the Principal Technical Committee at the various capital cities.

Representatives from other organisations including the Commonwealth Department of Shipping and Transport, the Commonwealth Bureau of Roads, the Commonwealth Scientific and Industrial Research Organisation and the Australian Road Research Board have attended some meetings of the committees where items of mutual interest were being considered.

The Association at its meetings dealt with matters which had come forward during the year from its Principal Technical Committee and arranged for further action to be taken by the Specialist Committees on additional aspects of road and bridge works and planning. Important matters considered included the organisation of the Australian Roads Survey 1969-1974; the conduct of training courses in Australia for African and Asian Engineers; reference of items to the Standards Association of Australia for the preparation or revision of Standards; the forthcoming conversion to the Metric System of Weights and Measure; and the progress made with the preparation of the following publications:—

"Highway Bridge Design Specification".
Revised Edition.

"Policy for Geometric Design of Rural Roads".
Revised Edition.

"Guide to Traffic Engineering Practice".
Revised Edition.

"Maintenance of Bituminous Surfaces".

"Road Maintenance Manual"

During the year the following technical manuals and bulletins were published:—

"Guide to the Publications and Policies of NAASRA".
1970 Edition.

"Glossary of Computer Terms"

"Welding Manual for Highway Bridges"

"Technical Road Notes". - Issue No. 14

"Guide to Stabilization in Roadworks"

"Amendments to 1968 Edition of "Vehicle Limits for Road Safety and Road Protection".

During the year the Department of Main Roads, New South Wales, was host Authority to a meeting of a Plant and Equipment Committee in February, 1971.

NAMING OF ROADS

By proclamation of 9th October, 1970 the undermentioned route was named Lachlan Valley Way.

Name	Description
Lachlan Valley Way	Trunk Road No. 56 Main Road No. 577 west of Forbes and Main Roads Nos. 230 and 501 Bowning to Booligal, via Boorowa, Cowra, Forbes, Condobolin Lake Cargelligo and Hillston within the Shires of Boorowa, Carrathool, Goodradigbee, Hay, Jemalong, Lachlan and Waugoola, and Municipalities of Condobolin, Cowra and Forbes.

VISITORS FROM OVERSEAS

The Department continued its co-operation with Commonwealth Authorities in providing study facilities for Fellows nominated to visit Australia.

The visiting Fellows were:—

- Mr. Samsak Arjon: a Civil Engineer employed by the Highways Department, Thailand.
- Mr. V. Dhiendhanopajai: a Civil Engineer employed by the Highways Department, Thailand.
- Mr. S. Thachayapong: a Civil Engineer employed by the Highways Department, Thailand.
- Mr. Sakchai Sripin: a Foreman employed by the Highways Department, Thailand.
- Mr. P. Thirumal: Executive Engineer, Public Works Department, Ceylon.
- Mr. B. Lye: Deputy Superintending Engineer, Public Works Department, Ceylon.
- Mr. Sutomo Warsowiwoho: Equipment Engineer, Department of Public Works and Electric Power, Indonesia.
- Mr. A.P. Gopinath Menon: a Civil Engineer employed by the Public Works Department, Singapore.
- Mr. Leonas Tarau: a Leading Hand Artisan employed by the Department of Public Works, Papua New Guinea.
- Mr. Ng Hai-Hong: a Land Surveyor employed by the Department of Public Works, Hong Kong.

ARMY SUPPLEMENTARY RESERVE UNIT

The twenty-first Annual Camp of 21 Construction Regiment RAE (SR) was held from 20th February to 2nd April, 1971 at Sussex Inlet.

This year the activity was conducted at three separate consecutive camps each of fourteen days duration.

During each camp a training course was conducted in Watermanship, Boating and Rafting on Lake Cudmirrah (also known as Swan Lake) to the South of Sussex Inlet, and a three day deployment field exercise was undertaken in the Lake area, at squadron level. This exercise was designed to test, in addition to basic military skills and ability to live in the field, watermanship and rafting skills, use of R.A.A.F. and R.A.N. Iroquois helicopters for aerial reconnaissance of "enemy" ground troops, casualty evacuation, loading and movement of stores to forward areas and transporting and disembarking of troops in "enemy" held areas. In addition, each squadron undertook basic field engineering training, and employed earth-moving equipment on improving the new camp site by constructing perimeter roads, drainage channels culverts and a helipad adjacent to the camp site, as well as installing and maintaining an electric power and lighting supply, and a water supply and reticulation system to the camp site.

A total of 432 members attended the camp of which 181 were Departmental employees.

Visitors to the camp included the Commissioner for Main Roads, the President of the Metropolitan Water Sewerage and Drainage Board, the Assistant Commissioner for the Snowy Mountains Commission, the Administering Commander of Eastern Command, the Administering Commander of Communications Zone, and Chief Engineer Eastern Command, and several other senior military officers.

During the 1970-71 Training Year, an Officer Promotion Coaching Course, an NCO Promotion Course and a Recruit Course were conducted by the Regiment and its higher formation, 11CE (WKS). Members also attended regular evening and weekend training at the Regiment's Depot at Marrickville.

Appendix No. 1

(A) COMMONWEALTH AID ROADS FUND

STATEMENT OF RECEIPTS AND PAYMENTS FOR THE YEAR ENDED 30TH JUNE, 1971

RECEIPTS			PAYMENTS		
	1970/71 \$	1969/70 \$		1970/71 \$	1969/70 \$
Grants under the Commonwealth Aid Roads Act, 1969			Construction and reconstruction of roads and bridges -		
Urban Arterial Roads - Schedule 2	32,740,000	26,070,000	Work by Councils -		
Rural Arterial Roads - Schedule 3	10,400,000	10,260,000	Urban Arterial Roads -		
Other Rural Roads - Schedule 4	3,168,713	3,016,880	Schedule 2 . . .	936,035	857,702
Planning & Research - Schedule 5	970,000	860,000	Other Rural Roads -		
			Schedule 4 . . .	3,190,628	4,126,663
			2,556,403		
			Work by Department -		
			Urban Arterial Roads -		
			Schedule 2 . . .	25,518,242	19,443,955
			Rural Arterial Roads -		
			Schedule 3 . . .	10,478,007	10,181,993
			Other Rural Roads -		
			Schedule 4 . . .	235,995	36,232,244
			202,567		
			Land acquisitions -		
			Urban Arterial Roads -		
			Schedule 2	6,285,723	5,768,343
			Planning and research		
			Schedule 5	893,554	314,854
			Total Payments . . .	47,538,184	39,325,817
Total Receipts	47,278,713	40,206,880			
Balance brought forward from last year	881,063	-	Balance carried forward	621,592	881,063
	\$48,159,776	\$40,206,880		\$48,159,776	\$ 40,206,880

* For details see Appendix No. 3

(B) COUNTY OF CUMBERLAND MAIN ROADS FUND

STATEMENT OF RECEIPTS AND PAYMENTS FOR THE YEAR ENDED 30TH JUNE, 1971

(i) General Purposes

RECEIPTS			PAYMENTS		
	1970/71 \$	1969/70 \$		1970/71 \$	1969/70 \$
Motor vehicle taxation	7,679,104	7,329,367	Maintenance and minor improvements of roads and bridges -		
Charges on commercial vehicles under the Road Maintenance (Contribution) Act, 1958	3,368,265	3,174,401	Work by Councils	646,122*	829,480
Levy upon Councils in accordance with Section 11 of the Main Roads Act, 1924	11,407,160	9,819,528	Work by Department	4,546,386+	5,192,508
Contributions by Councils towards maintenance and construction of Main and Secondary Roads	189,807	30,028	4,081,096		
Contributions by other departments and bodies towards maintenance and construction of Main and Secondary Roads	455,208	320,805	Construction and reconstruction of roads and bridges -		
Other	805,662	530,410	Work by Councils	301,041	171,489
			Work by Department	4,671,142	4,972,183ø
			3,968,977		
			Land acquisition	7,659,737	7,510,084
			Administrative expenses	3,073,299	2,330,307
			Purchase of land and buildings for administration and operation	873,276	871,229
			State Treasury Loans -		
			Interest, exchange, management and flotation expenses	181,530	166,630
			Loans under Section 42A of the Main Roads Act, 1924 -		
			Interest	639,031	594,334
			State Treasury - repayment of temporary advance	100,000	100,000
			Other	313,849	182,498
Total Receipts	23,905,206	21,204,539	Total Payments	23,005,413	20,806,124
Balance brought forward from last year	1,241,778	1,130,329	Transfer to County of Cumberland Reserve for Loan Repayments	134,175	128,550
	\$25,146,984	\$22,334,868	Transfers to and refunds from Special Purposes Accounts in respect of finance for Operating Accounts, Suspense Accounts and Reserve Accounts	20,794CR	158,416
			23,118,794		21,093,090
			Balance carried forward	2,028,190	1,241,778
				\$25,146,984	\$22,334,868

* For details see Appendix No. 6

+ For details see Appendix No. 6A

ø For details see Appendix No. 4.

Appendix No. 1 — continued

(B) COUNTY OF CUMBERLAND MAIN ROADS FUND — continued
STATEMENT OF RECEIPTS AND PAYMENTS FOR THE YEAR ENDED 30TH JUNE, 1971 — continued
(ii) Special Purposes

RECEIPTS			PAYMENTS		
	1970/71	1969/70		1970/71	1969/70
	\$	\$		\$	\$
State Government Loans -			Construction and reconstruction		
Repayable	1,700,000	300,000	of roads and bridges -		
Loan borrowings under Section 42A			Work by Councils 24,318		436
of the Main Roads Act, 1924 . . .	4,000,000	-	Work by Department		
Sydney Harbour Bridge Account -		 5,571,957	5,596,275*	1,987,222
Warringah Expressway -			Land acquisition	-	43,088
Construction (including land			State Treasury Loans -		
acquisition) 45,572		149,994	Sinking fund payment	14,440	13,130
Eastern Distributor (Cahill			Loans under Section 42A of		
Expressway Construction)			the Main Roads Act, 1924		
. 24,317	69,889	73,768	Repayment of Principal	202,366	159,784
Contributions by other					
departments and bodies	50,000				
Total Receipts	5,819,889	523,762	Total Payments . . .	5,813,081	2,203,660
Net transactions of Operating Accounts					
Suspense Accounts and transfers					
to and from the General Purposes					
Account in respect of finance					
for Reserve Accounts	1,830,064DR	176,236			
	3,989,825	699,998			
Balance brought forward from last			Balance carried forward	4,737,642	6,560,898
year	6,560,898	8,064,560			
	\$10,550,723	\$8,764,558		\$10,550,723	\$8,764,558

For details see Appendix No. 4A

(ii) Reserve for Loan Repayments

RECEIPTS			PAYMENTS		
	1970/71	1969/70		1970/71	1969/70
	\$	\$		\$	\$
Transfer from -					
General Purposes Account 134,175		128,550			
Special Purposes Account 169,250	303,425	52,125			
Interest on Investments	134,590	40,316			
Total Receipts	438,015	220,991	Total Payments	-	-
Balance brought forward from last			Balance carried forward		
year					
Investments	948,200	678,200	Investments	948,200	948,200
Cash	35,130	84,139	Cash	473,145	35,130
	1,421,345	983,330		1,421,345	983,330

Appendix No. 1 – continued

(C) COUNTRY MAIN ROADS FUND

STATEMENT OF RECEIPTS AND PAYMENTS FOR THE YEAR ENDED 30TH JUNE, 1971

(i) General Purposes

RECEIPTS			PAYMENTS		
	1970/71	1969/70		1970/71	1969/70
	\$	\$		\$	\$
Motor vehicle taxation	30,716,415	29,317,466	Maintenance and minor improvements of roads and bridges -		
Charges on commercial vehicles under the Road Maintenance (Contribution) Act, 1958	13,473,061	12,697,604	Work by Councils.	5,262,310*	5,711,943
Contributions by Councils towards maintenance and construction of Main Roads	85,027	38,805	Work by Department	12,027,229†	11,345,920
Contributions by other departments and bodies towards maintenance and construction of Main Roads	285,146	233,917	Construction and reconstruction of roads and bridges -		
Other	240,877	245,545	Work by Councils	4,508,524	6,557,268
			Work by Department	12,509,400	10,020,983
			Land acquisition.	994,374	849,494
			Administrative expenses	4,299,804	3,802,341
			Purchase of land and buildings for administration and operation	874,128	1,055,331
			State Treasury Loans -		
			Interest, exchange, management and flotation expenses	958,269	865,245
			Loans under Section 42A of the Main Roads Act, 1924 -		
			Interest	771,189	333,384
			State Treasury - repayment of temporary advance	100,000	100,000
			Other	457,557	414,462
			Total Payments	42,762,784	41,056,371
Total Receipts	44,800,526	42,533,337	Transfer to Country Reserve for Loan Repayments	147,076	96,915
			Transfers to and refunds from Special Purpose Accounts in respect of finance for Operating Accounts, Suspense Accounts and Reserve Accounts	817,299	1,944,203
				43,727,159	43,097,489
Balance brought forward from last year	\$1,251,467	\$1,815,619	Balance carried forward	\$2,324,834	\$ 1,251,467
	\$46,051,993	\$44,348,956		\$46,051,993	\$44,348,956

* For details see Appendix No. 7

+ For details see Appendix No. 7A

φ For details see Appendix No. 5

(ii) Special Purposes

RECEIPTS			PAYMENTS		
	1970/71	1969/70		1970/71	1969/70
	\$	\$		\$	\$
State Government Loans - Repayable.	550,000	1,700,000	Maintenance and minor improvement of roads and bridges -		
Loan borrowings under Section 42A of the Main Roads Act, 1924	5,000,000	8,600,000	Other Main Roads -		
Contributions by other departments and bodies	364,287	639,683	Work by Department	178,816	145,076
Commonwealth/State Government - Special grant for restoration of flood damage	2,400,000	-	Construction and reconstruction of roads and bridges		
			Work by Councils	59,137	63,740
			Work by Department	7,284,756	9,309,357
			Restoration of flood damage -		
			Work by Councils	917,692	-
			Work by Department	1,006,852	-
			State Treasury Loans -		
			Sinking fund payment	166,261	153,345
			Loans under Section 42A of the Main Roads Act, 1924		
			Repayment of principal	123,136	54,597
Total Receipts	8,314,287	10,939,683	Total Payments	9,736,650	9,726,115
Net transactions of Operating Accounts, Suspense Accounts and transfers to and from the General Purposes Accounts in respect of finance for Reserve Accounts	737,197DR	1,960,227			
	7,577,090	12,899,910			
Balance brought forward from last year	9,785,262	6,611,467	Balance carried forward	7,625,702	9,785,262
	\$17,362,352	\$19,511,377		\$17,362,352	\$19,511,377

* For details see Appendix No. 5A

STATEMENT OF RECEIPTS AND PAYMENTS FOR THE YEAR ENDED 30TH JUNE, 1971 - continued

Income	1970/71	1969/70	Expenditure	1970/71	1969/70
	\$	\$		\$	\$
Transfers from Sydney Harbour Bridge Account	256,186	353,878			
Interest on Investments	64,518	38,994			
Discount brought to account in respect of inscribed stock bought below par	<u>1,736</u>	<u>-</u>			
Total Income	322,440	392,872			
Balance brought forward from last year . . .	<u>993,895</u>	<u>601,023</u>			
	1,316,335	993,895	Balance carried forward	1,316,335	993,895

Appendix No. 1 — continued

SYDNEY HARBOUR BRIDGE ACCOUNT

BALANCE SHEET AS AT 30TH JUNE, 1971 (EXCLUDING CAPITAL COST TRANSACTIONS)

Liabilities			Assets		
	1970/71	1969/70		1970/71	1969/70
	\$	\$		\$	\$
Reserve - Repayment of loans raised by Commissioner	1,316,335	993,895	Furniture, fittings and equipment	378,209	256,072
Creditors			Less Depreciation	113,509	83,379
State Treasury for Sinking fund payments	1,944,160	1,944,160	Stock on hand	39,419	37,913
Other	201,819	254,551	Debtors	77,614	61,488
Accumulated Surplus	853,413	-	Cash on hand and at Treasury	2,955,994	1,379,487
	4,315,727	3,192,606	Investments	978,000	957,000
				4,315,727	2,608,581
			Accumulated deficiency	-	584,025
				4,315,727	3,192,606

Appendix No. 2

(A) COMMONWEALTH AID ROADS FUND

STATEMENT OF RECEIPTS AND PAYMENTS FOR THE FIVE YEARS ENDED 30TH JUNE, 1971

Heading	1966/67	1967/68.	1968/69	1969/70	1970/71
	\$	\$	\$	\$	\$
RECEIPTS					
Grants under the Commonwealth Aid Roads Act, 1969					
Urban Arterial Roads - Schedule 2				26,070,000	32,740,000
Rural Arterial Roads - Schedule 3				10,260,000	10,400,000
Rural Roads other than Arterial Roads - Schedule 4				3,016,880	3,168,713
Planning and Research - Schedule 5				860,000	970,000
Total:				40,206,880	47,278,713
PAYMENTS					
Construction and reconstruction of roads and bridges -					
Urban Arterial Roads - Schedule 2				20,301,657	26,454,277
Rural Arterial Roads - Schedule 3				10,181,993	10,478,007
Other Rural Roads - Schedule 4				2,758,970	3,426,623
Land acquisitions - Schedule 2				5,768,343	6,285,723
Planning and Research - Schedule 5				314,854	893,554
Total:				39,325,817	47,538,184

(B) COUNTY OF CUMBERLAND MAIN ROADS FUND

STATEMENT OF RECEIPTS AND PAYMENTS FOR THE FIVE YEARS ENDED 30TH JUNE, 1971

(i) General Purposes

Heading	1966/67	1967/68	1968/69	1969/70	1970/71
	\$	\$	\$	\$	\$
RECEIPTS					
Motor vehicle taxation and fees (State)	6,230,662	6,534,537	6,967,353	7,329,367	7,679,104
Charge on heavy commercial goods vehicles under the Road Maintenance (Contribution) Act (State)	2,281,026	2,513,109	2,959,884	3,174,401	3,368,265
Commonwealth Aid Roads Acts	4,954,583	5,279,159	5,618,544	-	-
Levy upon Councils under Section 11 of the Main Roads Act	7,600,200	8,240,912	7,538,001	9,819,528	11,407,160
Contribution by Councils	128,878	192,095	79,751	30,028	189,807
Other	490,776	711,776	653,936	851,215	1,260,870
Total:	21,686,125	23,471,588	23,817,469	21,204,539	23,905,206
PAYMENTS					
Maintenance and minor improvement of roads and bridges	3,349,295	3,646,681	4,146,532	4,910,576	5,192,508
Construction and reconstruction of roads and bridges	11,065,727	9,355,208	10,794,051	4,140,466	4,972,183
Land acquisition	3,868,100	4,400,652	4,680,840	7,510,084	7,659,737
Administrative Expenses	1,166,933	1,474,188	1,700,758	2,330,307	3,073,299
Purchase of land and buildings for administration and operation	263,344	174,848	221,054	871,229	873,276
Interest, exchange, management and flotation expenses on State Loans	122,860	122,390	153,930	166,630	181,530
Interest loans raised under Section 42A of the Main Roads Act	289,372	305,983	454,252	594,334	639,031
Other	168,269	146,255	160,022	182,498	313,849
Repayment of Advances from State Treasury	-	100,000	100,000	100,000	100,000
Total:	20,293,900	19,726,205	22,411,439	20,806,124	23,005,413

(ii) Special Purposes

Heading	1966/67	1967/68	1968/69	1969/70	1970/71
	\$	\$	\$	\$	\$
RECEIPTS					
Loan Funds — State Government	800,000	4,700,000	4,800,000	300,000	1,700,000
Loan Funds — Borrowings under Section 42A of the Main Roads Act	700,000	3,750,000	5,400,000	-	4,000,000
Expressways - Construction from Sydney Harbour Bridge Account	3,743,241	4,775,000	900,000	223,762	69,889
Commonwealth Aid Roads Acts	208,169	160,444	238,385	-	-
Contributions from other departments and bodies	480,000	-	41,908	-	50,000
Total:	5,931,410	13,385,444	11,380,293	523,762	5,819,889
PAYMENTS					
Construction and reconstruction - Main Roads (and bridges)	236,052	1,057,909	4,633,286	1,393,237	-
Roads (and bridges) other than Main Roads	27,063	-	272,937	-	-
Construction of Expressways	7,290,796	11,740,691	6,326,209	637,509	5,596,275
Department of Motor Transport - for Public Vehicles Fund	54,703	56,891	59,167	-	-
Department of Public Works - for research	-	-	566	-	-
Payments of Sinking Fund - State Government Loans	8,940	9,620	10,820	13,130	14,440
Repayment of Principal - Loans raised under Section 42A of the Main Roads Act	92,448	95,542	128,518	159,784	202,366
Total:	7,710,002	12,960,653	11,431,503	2,203,660	5,813,081

Appendix No. 2 - Continued

(C) COUNTRY MAIN ROADS FUND

STATEMENT OF RECEIPTS AND PAYMENTS FOR THE FIVE YEARS ENDED 30TH JUNE, 1971

(i) General Purposes

Heading	1966-67 \$	1967-68 \$	1968-69 \$	1969-70 \$	1970-71 \$
RECEIPTS					
Motor Vehicle taxation and fees (State)	24,922,646	26,138,150	27,869,412	29,317,466	30,716,415
Transfer from the Road Transport and Traffic Fund	338,148	10,108	-	-	-
Charge on heavy commercial goods vehicles under the Road Maintenance (Contribution) Act (State)	9,124,104	10,052,435	11,839,537	12,697,604	13,473,061
Commonwealth Aid Roads Acts	19,262,334	20,561,636	21,918,175	-	-
Contributions by Councils	120,662	192,923	182,310	38,805	85,027
Other	460,896	456,046	326,363	479,462	526,023
Total:	54,228,790	57,411,298	62,135,797	42,533,337	44,800,526
PAYMENTS					
Maintenance and minor improvements of roads and bridges	14,319,468	13,693,520	15,479,836	17,057,863	17,289,539
Construction and reconstruction of roads and bridges	34,315,885	35,001,249	37,821,718	16,578,251	17,017,924
Land Acquisition	779,231	641,974	602,508	849,494	994,374
Administrative expenses	3,128,768	3,342,109	3,678,322	3,802,341	4,299,804
Purchase of land and buildings for administration and operation	656,341	511,044	857,123	1,055,331	874,128
Interest, exchange, management and flotation expenses on State Loans	828,960	845,718	817,177	865,245	958,269
Interest on Loans raised under Section 42A of the Main Roads Act	-	-	96,358	333,384	771,189
Other	434,378	561,113	522,426	414,462	457,557
Repayment of Advances from State Treasury	200,000	100,000	100,000	100,000	100,000
Total:	54,663,031	54,696,727	59,975,468	41,056,371	42,762,784

(ii) Special Purposes

Heading	1966-67 \$	1967-68 \$	1968-69 \$	1969-70 \$	1970-71 \$
RECEIPTS					
Repayable advance - State Government	800,000	-	-	-	-
Loans Funds - State Government	3,200,000	-	-	1,700,000	550,000
Loan Funds - Borrowings under Section 42A of the Main Roads Act	1,000,000	300,000	2,700,000	8,600,000	5,000,000
State and/or Commonwealth Government Grants	62,505	-	-	-	2,400,000
Commonwealth Aid Roads Acts	900,597	963,339	1,169,164	-	-
Contributions from other departments and bodies	25,640	-	186,480	639,683	364,287
Total:	5,988,742	1,263,339	4,055,644	10,939,683	8,314,287
PAYMENTS					
Maintenance of roads, bridges and ferries - other than Main Roads	8,420	11,774	92,996	145,076	178,816
Restoration of Flood Damage	-	-	-	-	1,924,544
Construction and reconstruction - Main Roads (and bridges)	81,215	330,000	1,124,255	8,984,356	6,647,978
Roads (and bridges) other than Main Roads	3,010,449	11,097	890	388,741	695,915
Maintenance and construction - Unclassified roads in Western Division	112,167	169,677	373,341	-	-
Department of Motor Transport - for Public Vehicles Fund	218,813	227,565	236,667	-	-
Department of Public Works - for works connected with transport by water and for research	556,000	555,000	558,266	-	-
Repayment of Principal and Payment of Sinking Fund - State Government Loans	133,713	140,592	145,202	153,345	166,261
Repayment of Principal - Loans raised under Section 42A of the Main Roads Act	-	-	32,568	54,597	123,136
Total:	4,120,777	1,445,705	2,564,185	9,726,115	9,736,650

(D) DEVELOPMENTAL ROADS FUND

STATEMENT OF RECEIPTS AND PAYMENTS FOR THE FIVE YEARS ENDED 30TH JUNE, 1971

Heading	1966-67 \$	1967-68 \$	1968-69 \$	1969-70 \$	1970-71 \$
RECEIPTS					
Commonwealth Aid Roads Acts	1,816,750	1,887,674	1,724,117	-	-
Other	-	-	-	-	-
Total:	1,816,750	1,887,674	1,724,117	-	-
PAYMENTS					
Construction and reconstruction of Developmental Roads and Works	1,802,990	1,825,310	1,319,850	506,015	-
Total:	1,802,990	1,825,310	1,319,850	506,015	-

Appendix No. 2 - Continued

(E) TOTAL ALL ROADS FUND

STATEMENT OF RECEIPTS AND PAYMENTS FOR THE FIVE YEARS ENDED 30TH JUNE, 1971

(i) General Purposes

Heading	1966-67 \$	1967-68 \$	1968-69 \$	1969-70 \$	1970-71 \$
RECEIPTS					
Motor Vehicle Taxation and fees (State)	31,153,308	32,672,687	34,836,765	36,646,833	38,395,519
Transfer from the Road Transport and Traffic Fund	338,148	10,108	-	-	-
Charge on heavy commercial goods vehicles under the Road Maintenance (Contribution) Act (State)	11,405,130	12,565,544	14,799,421	15,872,005	16,841,326
Commonwealth Aid Roads Acts	26,033,667	27,728,469	29,260,836	40,206,880	47,278,713
Levy upon Councils under Section 11 of the Main Roads Act	7,600,200	8,240,912	7,538,001	9,819,528	11,407,160
Contributions by Councils	249,540	385,018	262,061	29,878	274,834
Other	951,672	1,167,822	980,299	1,369,632	1,786,893
Total:	77,731,665	82,770,560	87,677,383	103,944,756	115,984,445
PAYMENTS					
Maintenance and minor improvement of roads and bridges	17,668,763	17,340,201	19,626,368	21,968,439	22,482,047
Construction and reconstruction of roads and bridges	47,184,602	46,181,767	49,935,619	54,467,352	62,349,014
Land acquisition	4,647,331	5,042,626	5,283,348	14,127,921	14,939,834
Administrative expenses	4,295,701	4,816,297	5,379,080	6,132,648	7,373,103
Planning and Research	-	-	-	314,854	893,554
Purchase of land and buildings for administration and operation	919,685	685,892	1,078,177	1,926,560	1,747,404
Interest, exchange, management and flotation expenses on State Loans	951,820	968,108	971,107	1,031,875	1,139,799
Interest on loans raised under Section 42A of the Main Roads Act	289,372	305,983	550,610	927,718	1,410,220
Other	602,647	707,368	682,448	596,960	771,406
Repayment of Advance from State Treasury	200,000	200,000	200,000	200,000	200,000
Total:	76,759,921	76,248,242	83,706,757	101,694,327	113,306,381

(ii) Special Purposes

Heading	1966-67 \$	1967-68 \$	1968-69 \$	1969-70 \$	1970-71 \$
RECEIPTS					
Repayable advance - State Government	800,000	-	-	-	-
Loan Funds - State Government	4,000,000	4,700,000	4,800,000	2,000,000	2,250,000
Loan Funds - Borrowings under Section 42A of the Main Roads Act	1,700,000	4,050,000	8,100,000	8,600,000	9,000,000
State and/or Commonwealth Government Grants	62,505	-	-	-	2,400,000
Expressways - Contribution from Sydney Harbour Bridge Account	3,743,241	4,775,000	900,000	223,762	69,889
Commonwealth Aid Roads Acts	1,108,766	1,123,783	1,407,549	-	-
Contributions from other departments and bodies	505,640	-	228,388	639,683	414,287
Total:	11,920,152	14,648,783	15,435,937	11,463,445	14,134,176
PAYMENTS					
Maintenance of roads, bridges and ferries - other than Main Roads	8,420	11,774	92,996	145,076	178,816
Restoration of Flood Damage	-	-	-	-	1,924,544
Construction and reconstruction - Main Roads (and bridges)	317,267	1,387,909	5,757,541	10,377,593	6,647,978
Roads (and bridges) other than Main Roads	3,037,512	11,097	273,827	388,741	695,915
Construction of Expressways	7,290,796	11,740,691	6,326,209	637,509	5,596,275
Maintenance and construction - Unclassified roads in the Western Division	112,167	169,677	373,341	-	-
Department of Motor Transport - for Public Vehicles Fund	273,516	284,456	295,834	-	-
Department of Public Works - for works connected with transport by water and for research	556,000	555,000	558,832	-	-
Repayment of Principal and Payment of Sinking Fund - State Government Loans	142,653	150,212	156,022	166,475	180,701
Repayment of Principal - Loans raised under Section 42A of the Main Roads Act	92,448	95,542	161,086	214,381	325,502
Total:	11,830,779	14,406,358	13,995,688	11,929,775	15,549,731

(F) SYDNEY HARBOUR BRIDGE ACCOUNT

STATEMENT OF INCOME AND EXPENDITURE FOR THE FIVE YEARS ENDED 30 TH JUNE, 1971

Heading	1966-67 \$	1967-68 \$	1968-69 \$	1969-70 \$	1970-71 \$
INCOME					
Road tolls on vehicles	3,878,326	4,010,747	4,302,533	4,549,136	4,518,708
Railway passenger tolls (net)	280,250	287,216	284,416	289,630	299,992
Omnibus passenger tolls	29,252	26,777	27,730	26,851	26,151
Rents	107,176	119,172	125,640	139,347	170,700
Other	352	76	-	-	-
Total:	4,295,356	4,443,988	4,740,319	5,004,964	5,015,551
EXPENDITURE					
Loan Charges - State Loans					
Interest	777,150	767,400	755,970	751,830	764,430
Exchange	31,890	22,490	12,570	13,250	11,460
Sinking Fund	338,700	357,350	367,360	385,170	407,920
Management Expenses	2,630	3,200	2,430	2,610	2,790
Flotation Expenses	44,650	44,990	37,120	41,450	43,060
	1,195,020	1,195,430	1,175,450	1,194,310	1,229,660
Loan Charges - borrowings under Section 42A of the Main Roads Act, 1924					
Interest	269,947	471,768	517,747	508,958	499,722
Repayment of Principal	79,901	126,435	153,718	160,499	167,668
Transfer to Reserve for loan repayment	56,563	227,209	226,487	353,878	256,186
	406,411	825,412	897,952	1,023,335	923,576
Maintenance, lighting and cleaning bridge and approaches	584,015	570,742	577,746	576,936	564,345
Provision of traffic facilities	116,592	136,103	132,184	149,018	161,124
Cost of collecting road tolls	542,742	539,634	584,275	635,340	516,030
Alterations to toll gates and archways	-	-	72,694	70,046	32,143
Other	47,422	55,416	101,214	71,223	81,346
Total:	2,892,202	3,322,737	3,541,515	3,720,208	3,508,224
Surplus for the year	1,403,154	1,121,251	1,198,804	1,284,756	1,507,327

Appendix No. 3

COMMONWEALTH AID ROADS FUND

SUMMARY OF EXPENDITURE FROM DEPARTMENT'S FUNDS ON CONSTRUCTION AND RECONSTRUCTION WORKS

CONSTRUCTING AUTHORITY: D FOR DEPARTMENT' C FOR COUNCILS

City, Municipal or Shire Area	Road No	Location of Work	Class of Construction	Amount
COUNTY OF CUMBERLAND AREA				
EXPRESSWAYS				
North-Western Expressway				
Hunters Hill	X3	Bridge over Tarban Creek	Repairs to portal leg joints D	14,945
				\$14,945
Western Expressway				
Auburn	X4	King Avenue, Auburn	Prestressed concrete bridge D	155,712
do	X4	Silverwater Road, Auburn	do D	38,988
do	X4	Hill Road, Auburn	do D	113,099
Holroyd	X4	Clay Cliff Creek	Piping D	74
Penrith	X4	Regentville to St Marys	Construction D	1,928,217
do	X4	Bridge over Nepean River at Regentville	Western approach D	276,583
do	X4	Bringelly Road, 13.47m from Prospect	Construction of underpass..... D	672,728
do	X4	Mulgoa Road, 15.61m from Prospect	Construction of overpass D	157,473
do	X4	South Creek, 9.91m from Prospect	Twin reinforced concrete bridges D	270,599
do	X4	Ropes Creek, 7.19m from Prospect	do D	116,053
do	X4	Mamre Road, St Marys	Construction of overpass D	170,222
do	X4	South Creek, 9.78m from Prospect	Reinforced concrete box culvert..... D	9,629
do	X4	Kent Road, 10.75m from Prospect	Construction of overpass D	156,690
do	X4	Nepean River at Regentville	Prestressed concrete bridge D	496,030
do	X4	Roper Street, Colyton	Construction of overpass D	23,481
do	X4	Kingswood Road, 12.44m from Prospect	do D	175,490
Sydney	X4	Western Distributor	Construction - first stage D	1,774,899
				\$6,535,967
South-Western Expressway				
Campbelltown	X5	Cross Roads to Campbelltown	Construction D	1,977,491
do	X5	Aero Road, Ingleburn	Construction of twin overbridge D	281,453
do	X5	St Andrews Road, Minto	Construction of underpass D	29
do	X5	Raby Road, Minto	Construction of overpass D	114,470
do	X5	Second Crossing M.R. No. 177, - 28m from Sydney	Underpass sub-structure..... D	86,352
do	X5	Brooks Road, Ingleburn	Construction of overbridge..... D	171,112
Liverpool	X5	S.H. No.2, 24m from Sydney	Construction of overpass D	31
do	X5	Roaches Creek, S.H. No. 2, - 23.9m from Sydney	Reinforced concrete box culvert D	236,461
Liverpool and Campbelltown	X5	First Crossing M.R. No. 177 - 24.7m from Sydney	Underpass sub-structure D	59,106
				\$ 2,926,505
				Total - Expressways
				\$ 9,477,417
STATE HIGHWAYS				
Princes Highway				
Rockdale	1	Bay Street to Catherine Street	Widening and reconstruction D	50,665
Sutherland	1	Oak Road to President Avenue	Dual carriageway D	149,506
do	1	Heathcote to Waterfall	do D	228,515
do	1	Farnell Avenue, Engadine	Deviation including bridge over South Coast Railway D	452,134
do	1	Anzac Avenue, Engadine to Veno Street Heathcote	Dual carriageway and deviation D	367,612
do	1	South of Loftus	Railway overbridge D	22,366
				\$ 1,270,798
Hume Highway				
Ashfield	2	Greenhills Street to Weatherill Street	Reconstruction D	75,506
Bankstown	2	Shellcote Road to Stacey Street	Dual carriageway D	60,098
do	2	Roberts Road to Shellcote Road	Divided carriageway D	131,575
do	2	Johnson Road to S.H. No. 13	Kerbside lanes D	55,390
Burwood and Strathfield	2	Burwood Road to Dickinson Street	Reconstruction of damaged pavement D	90,480
Burwood	2	Intersection with Burwood Road	Widening and realignment D	22,866
Camden	2	Nepean River at Camden	Reinforced concrete sub-structure D	23,337 †
do	2	Nepean River at Camden	Steel and concrete bridge D	70,316 †
Fairfield	2	Knight Street to Cabramatta Road	Turning bays D	19,951
do	2	Intersection with S.R. No. 2088	Reconstruction, widening and channelisation D	22,033
Liverpool	2	Water Supply Canal to City Boundary Leppington	Asphaltic concrete resheeting D	14,555
do	2	Sydney Road to Goulburn Street	Third lane, kerb & gutter and drainage D	10,145
do	2	Intersection with M.R. No. 578	Pavement failure D	30,178
				\$ 626,430

† For Additional Expenditure see Appendix No. 5A

Appendix No. 3 - continued

COMMONWEALTH AID ROADS FUND — continued

SUMMARY OF EXPENDITURE FROM DEPARTMENT'S FUNDS ON CONSTRUCTION AND RECONSTRUCTION WORKS — continued

CONSTRUCTING AUTHORITY: D indicates Department; C indicates Council

City, Municipal or Shire Area	Road No	Location of Work	Class of Construction	Amount \$
COUNTY OF CUMBERLAND AREA — continued				
STATE HIGHWAYS — continued				
Great Western Highway				
Blacktown	5	19.98m to 21.75m west of Sydney	Deviation	D 15,678
do	5	Eastern Creek Bridge to Chatsworth Road Mt. Druitt	Reconstruction	D 393,583
do	5	21.57m to 23.3m west of Sydney	Channelisation	D 139,132
Leichhardt and Marrickville	5	Intersection with S.R. No. 2018 and S.R. No. 2046	Channelisation including grade separation	D 129,305
Marrickville	5	Junction with S.R.No. 2018 and S.R. 2046	Overbridge	D 110,203
Penrith	5	Intersection with Henry Street West, Penrith	Reconstruction	D 27,932
do	5	Bennett Road to Glassop Street, St Marys	Dual carriageway	D 404,479
do	5	Intersection with Henry Street East, Penrith	Reconstruction	D 29,295
do	5	Chatsworth Road to Bennett Road	do	D 506,680
do	5	St. Marys		
do	5	Quarry Hill 31.3m to 32m west of Sydney	Dual carriageway	D 36,655
do	5	Ropes Creek 27.4m west of Sydney	Prestressed concrete bridge	D 94,403
Strathfield and Auburn	5	Esher Street, Concord to Platform Street, Lidcombe	Restoration of failed pavement at various locations.	D 106,823
				\$ 1,994,168
Pacific Highway				
Hornsby	10	Leonard Street to Edgeworth David Avenue, Hornsby	Widening	D 13,727
				\$ 13,727
State Highway No. 13				
Hornsby	13	Carlingford Road to Murray Farm Road	Kerbside lanes	D 150,607
Parramatta, Bankstown and Fairfield	13	Railway Overbridge at Villawood	Approaches	D 137,184
				287,791
				Total - State Highways
				4,192,914
ORDINARY MAIN ROADS				
Auburn	190	St. Hilliers Road to Wyatt Park	Reconstruction	C 20,000
do	190	James Street to The Boulevarde, Lidcombe	do	C 10,919
Baulkham Hills	160	3.1m to 4.74m north of Rogans Hill	Reconstruction and widening	C 64,000
do	184	First Ponds Creek at Vineyard	Prestressed concrete bridge	D 61,368
Baulkham Hills and Parramatta	184	Barney Street to Briens Road	Widening of carriageway	D 147,255
Baulkham Hills	184	Coronation Street to Palace Road	Four lanes	D 15,936
Botany	170	McIntosh Street to Millpond Road	Widening	D 78,047
do	170	McFayden Street to Cranbrook Street	Reconstruction	D 20,306
Botany and Randwick	183	Over M.R. No. 593	Reinforced concrete bridge	D 22,570
Botany	344	Bridge over Millpond Creek	Widening	D 19,434
do	344	Bay Street to Corish Circle	Dual carriageway	D 236,761
do	593	South bound carriageway over Millpond Creek	Reinforced concrete bridge	D 14,866
Botany and Randwick	593	Dowling Street to Dransfield Ave.	Reconstruction	D 236,774
Campbelltown	177	Bunbury Curran Creek - 4.6m north of Campbelltown	Prestressed concrete bridge	D 908
do	177	Spring Creek, 11.6m south of S.H.No.2	Box culvert and approaches	D 27,993
do	177	Cottage Creek, 4.18m from S.H. No. 2	Prestressed concrete bridge	D 6,413
Fairfield	515	Intersection with Cowpasture Road	Reconstruction	D 52,087
do	515	Wallgrove Military Camp to the Horsley Drive	do	D 163,233
do	534	Bridge over Railway Line at Cabramatta	Approaches	C 57,261
do	534	Cabramatta	Railway overbridge	D 250,374
Hornsby	139	Epping Railway Station	Pedestrian overbridge	D 34,989
do	139	Epping Railway Overbridge	Widening of approaches	D 38,270
Hurstville	508	Henry Lawson Drive from M.R.No. 168 and Hymen Street	Reconstruction	C 16,000
Ku-ring-gai	162	Puttarri Avenue to Killeaton Street	Reconstruction and widening	D 51,748
do	162	Yanko Road to Kendall Street West Pymble	do	D 358,412
do	162	Cultowa Road to Ridge Street	do	D 15,652

Appendix No. 3 — continued

COMMONWEALTH AID ROADS FUND — continued

SUMMARY OF EXPENDITURE FROM DEPARTMENT'S FUNDS ON CONSTRUCTION AND RECONSTRUCTION WORKS — continued

CONSTRUCTING AUTHORITY: D indicates Department; C indicates Council

City, Municipal or Shire Area	Road No	Location of Work	Class of Construction	Amount
COUNTY OF CUMBERLAND AREA — continued				\$
ORDINARY MAIN ROADS — continued				
Ku-ring-gai	328	Ferncourt Avenue to Rowe Street	Dual carriageway D	23,613
Lane Cove	166	Burns Bay Road to Epping Road	Reconstruction D	346,781
do	373	Near Cumberland Avenue	Restoration of slip D	11,859
do	373	Moore Street to Stringy Bark Creek	Widening D	49,198
Liverpool	167	0.0m to 1.8m from Milperra Bridge	Dual carriageway D	11,310
Marrickville	167	Enmore Road to Livingston Road	Reconstruction and bitumen surfacing . . C	20,000
Mosman	164	Clifford Street to Bickell Road	Reconstruction and widening D	105,331
do	164	Ida Street to Pearl Bay Road	Restoration of collapsed roadway . . . D	140,246
do	164	Glover Street to Paling Street	Widening D	35,393
do	164	Glover Street, Cremorne to Clifford Street, Spit Junction	Dual carriageway D	56,928
do	164	Intersection with Parriwi Road	Traffic signal installations D	14,656
Parramatta	139	Epping	Railway Overbridge D	43,006
Parramatta and Ryde	158	Victoria Road to Pennant Hills Road	Reconstruction, bitumen surfacing and surface drainage D	298,907
Parramatta	165	Pemberton Street to Macarthur Street	Three lane carriageway D	291,098
Penrith	154	Kings Hill Road to Garswood Street	Reconstruction D	30,770
do	154	Kingswood		
do	154	Kings Hill Road to Garswood Street	do D	392,159
do	154	Intersection with S.R. No. 2063 and Cranebrook Road	Channelisation D	81,133
Randwick	170	Bunnerong Creek	Reinforced concrete box culvert D	58,825
do	170	Bumborah Point Road to Bunnerong Road	Dual carriageways D	125,304
Ryde	162	Epping Road to Fonteroy Road	Dual carriageway D	274,701
do	165	Blaxland Road to Pittwater Road	Reconstruction of damaged pavement. . D	85,795
do	373	Bridge over Shrimpton Creek	Widening D	10,949
do	373	Vimiera Road to York Street	Reconstruction and widening D	44,044
do	373	M.R. No.162 to Shrimptons Creek	Temporary widening D	79,567
do	373	Pittwater Road to Lane Cove River	Dual carriageway D	15,833
do	373	Paul Street to Vimiera Road North	Reconstruction D	412,058
South Sydney and Botany	170	Bourke Street to Harcourt Parade	Dual carriageway D	10,857
Sutherland	227	Jacaranda Road to Cronulla Street	do C	100,000
Sydney	173	Kings Cross	Construction D	160,408
do	173	Bridge over Kellett Street at Craigend Palace	Excavation D	27,693
do	173	Kings Cross Road to Bayswater Road	Connecting road D	53,643
Sydney and South Sydney	593	Flinders Street to Todman Avenue	Widening D	447,785
Moore Park				
Warringah	164	Namona Street to Elimatta Road, Mona Vale	Reconstruction D	293,007
do	164	Bassett Street to Bardo Road, Mona Vale	Reconstruction and widening D	535,662
do	328	Wakehurst Parkway to Pittwater Road Beacon Hill	Dual carriageway D	607,976
do	530	Surfers Parade to Wyuna Avenue Harbord, Section 2.	Construction C	10,000
do	530	Over Harbord Lagoon at Curl Curl	Reinforced concrete bridge C	16,500
Willoughby	599	Sailors Bay Road to Babbage Road Willoughby	Reconstruction and widening D	432,855
Windsor	184	Intersection with Macquarie and Bridge Streets	do D	27,410
Total — Ordinary Main Roads				\$ 7,723,500
SECONDARY ROADS				
Ashfield	2056	S.H. No.5 to Dobroyd Parade	Reconstruction and widening D	46,734
Canterbury	2060	King Georges Road to Waratah Street	Reconstruction C	23,000
Holroyd	2071	Various lengths	construction C	14,400
Hunters Hill	2052	Intersection with S.R. No. 2033	Reconstruction C	10,000
Ku-ring-gai	2043	Barra Brui	Deviation C	11,416
Lane Cove	2070	Hinkler Street to Osborne Street	Widening C	15,253
do	2070	Bridge Street to Wangalla Road	Reconstruction C	31,845
do	2070	Warraroon Road to Longueville Rd.	do C	13,889
Randwick	2074	Malabar Junction	Improvement C	65,000
Ryde	2024	Balaclava Road	Reconstruction and widening C	22,815
Total - Secondary Roads				\$ 254,352
ROADS OTHER THAN MAIN ROADS				
Bankstown		Bridge over Georges River at Alford's Point	Northern approach D	48,132
do		Railway overbridge, Stacey Street, Bankstown	Approaches D	99,571
Bankstown and Sutherland		Georges River at Alford's Point	Prestressed concrete bridge D	308,667

Appendix No. 3 — continued

COMMONWEALTH AID ROADS FUND — continued

SUMMARY OF EXPENDITURE FROM DEPARTMENT'S FUNDS ON CONSTRUCTION AND RECONSTRUCTION WORKS — continued

CONSTRUCTING AUTHORITY: D indicates Department; C indicates Council

City, Municipal or Shire Area	Road No	Location of Work	Class of Construction	Amount
COUNTY OF CUMBERLAND AREA — continued				\$
ROADS OTHER THAN MAIN ROADS — continued				
Bankstown		Stacey Street, Bankstown	Railway overbridge D	11,696
Rockdale		Tancred Avenue to bridge over Cooks River	Construction D	250,874
do		Cooks River at Marsh Street	Prestressed concrete bridge D	539,865 †
Sutherland		Bridge over Georges River at Alford	Southern approach D	262,814
Total — Roads Other than Main Roads				\$ 1,521,619
COUNTRY URBAN AREAS				
EXPRESSWAYS				
Southern Expressway				
Wollongong	X6	Gladstone Avenue to M.R. No.259	Dual carriageway D	44,503
do	X6	Five Islands Road to Northcliffe Drive	Construction D	787,885
do	X6	The Avenue	Prestressed concrete bridge D	185,358
do	X6	Masters Road	Overbridge D	296,578
do	X6	Five Island Road	Prestressed concrete bridge D	117,198
Total - Expressways				\$1,431,522
STATE HIGHWAYS				
Princes Highway				
Wollongong	1	Bridge over Macquarie Rivulet	Approaches including intersection with S.H. No. 25 D	92,832
				\$ 92,832
Pacific Highway				
Lake Macquarie	10	Robert Street to Ada Street, South Belmont	Dual carriageway including approaches to Cold Tea Creek D	172,829
Newcastle	10	Smith Street to National Park Street	Construction including approaches to Cottage Creek Bridge C	51,130
Total — State Highways				\$223,959
				\$316,791
TRUNK AND ORDINARY MAIN ROADS				
Lake Macquarie	527	Junction with M.R. No. 223	Improvement C	67,617
Newcastle	82	Turton Road to Broadmeadow Road	Reconstruction C	50,000
do	82	Turton Road to Edith Street	Completion of second carriageway . . . C	50,368
do	82	Donald Street Overbridge	Approaches C	38,268
do	316	George Street to Bull Street	Industrial route C	181,162
Wollongong	522	Lake Illawarra at Windang	Duplication of bridge D	265,538
Total — Trunk and Ordinary Main Roads				\$ 652,953
COUNTRY RURAL AREA				
STATE HIGHWAYS				
Princes Highway				
Imlay	1	4.91m to 8.21m south of Eden	Construction D	248,829
				\$ 248,829
Hume Highway				
Gundagai	2	Daisy Bed Creek 1m south of Coolac	Approaches D	229,860
Hume	2	30.5m to 33.3m south of Holbrook	Reconstruction and bitumen surfacing . . D	275,113
Wingecarribee	2	93m to 94.2m south of Sydney	Reconstruction and approaches to Black Bob's Creek D	362,049
Wollondilly	2	46m to 47m south of Sydney	Reconstruction D	484,045
				1,351,067
Snowy Mountains Highway				
Snowy River	4	6m to 8.4m west of Kiandra	Reconstruction and bitumen surfacing . . D	155,781
Tumut	4	39.4m to 48.85m east of Tumut	do D	190,283
Tumut	4	32.9m to 39.4m east of Tumut	do D	321,441
				\$ 667,505
Great Western Highway				
Blaxland	5	Intersection with T.R. No. 55	Reconstruction D	195,720
Turon	5	24.4m to 27.7m west of Lithgow	Deviation D	276,185
do	5	21.7m to 24.4m west of Lithgow	Reconstruction and bitumen surfacing . . D	165,935
				\$ 637,840
Mid-Western Highway				
Lyndhurst	6	3.9m to 6m west of Blayney	Reconstruction and bitumen surfacing . . D	156,924
				\$ 156,924
Mitchell Highway				
Darling	7	40m to 48.8m north of Bourke	Reconstruction and bitumen surfacing . . D	452,892
Orange	7	23.1m to 26.7m west of Bathurst	do D	155,000
				\$ 607,892
Barrier Highway				
Central Darling	8	13m to 21m east of Wilcannia	Reconstruction and bitumen surfacing . . D	188,558

† For Additional Expenditure see Appendix No. 4

Appendix No. 3 — continued

COMMONWEALTH AID ROADS FUND — continued

SUMMARY OF EXPENDITURE FROM DEPARTMENT'S FUNDS ON CONSTRUCTION AND RECONSTRUCTION WORKS — continued

CONSTRUCTING AUTHORITY: D indicates Department; C indicates Council

City, Municipal or Shire Area	Road No	Location of Work	Class of Construction	Amount
COUNTRY RURAL AREA — continued				\$
STATE HIGHWAYS — continued				
Barrier Highway				
Central Darling	8	102m to 111.28m west of Cobar	Reconstruction and bitumen surfacing . . D	293,013
				\$ 481,571
New England Highway				
Newcastle	9	11.5m to 13.93m north of Newcastle	Deviation D	211,515
Patrick Plains	9	19.7m to 21.1m west of Maitland	Reconstruction D	178,112
Uralla	9	50.13m to 53.29m north of Tamworth	Reconstruction and bitumen surfacing . . D	250,327
				639,954
Pacific Highway				
Byron	10	14m to 15.45m north of Bangalow	Climbing lanes D	203,534
Coffs Harbour	10	3.4m to 4.8m north of Coffs Harbour	Reconstruction D	402,825
Nambucca	10	Lower Worrell Creek, 32.6m to 34.4m North of Kempsey	Deviation D	501,107
Tweed	10	6.99m to 8m south of Murwillumbah	Climbing lanes D	195,501
Wyong	10	7.6m to 8.3m north of Gosford	Reconstruction and widening D	176,340
				\$ 1,479,307
Oxley Highway				
Hastings	11	38.5m to 43.38m west of Port Macquarie	Reconstruction and bitumen surfacing . . D	367,725
Walcha	11	15m to 24m east of Walcha	do D	397,625
Warren	11	4m to 12m east of Nevertire	do D	205,453
do	11	0.m to 4m east of Nevertire	Reconstruction and widening D	153,021
				\$ 1,123,824
Sturt Highway				
Hay	14	12m to 19.5m west of Hay	Reconstruction and widening D	224,345
Kyeamba	14	13.8m to 17.55m west of S.H. No. 2	Deviation D	363,658
				\$ 588,003
Barton Highway				
Goodradigbee	15	23m to 24.5m from Yass	Reconstruction and bitumen surfacing . . D	193,233
				\$ 193,233
Bruxner Highway				
Ashford	16	5m to 17.9m west of Bonshaw	Deviation D	331,480
				\$ 331,480
Newell Highway				
Boolooroo	17	47m to 54m north of Moree	Reconstruction and bitumen surfacing . . D	163,470
do	17	62m to 72m north of Moree	do D	254,220
Coonabarabran	17	67.8m to 71.5m south of Narrabri	do D	170,645
do	17	63m to 67m south of Narrabri	do D	165,906
				\$ 754,241
Monaro Highway				
Monaro	19	2m to 5.5m south of Cooma	Reconstruction and bitumen surfacing . . D	210,145
				\$ 210,145
				Total — State Highways
				\$ 9,471,815
TRUNK AND ORDINARY MAIN ROADS				
Bogan	204	21m to 25m north of Warren	Reconstruction and bitumen surfacing . . C	35,807
Boorowa	380	3.5m to 5.8m west of T.R. No. 56	do C	28,000
Boree	238	4m to 11m from Canowindra	do C	55,749
Brewarrina	70	5.3m to 12m north of Brewarrina	do C	25,000
do	70	8.3m to 12m north of Brewarrina	do C	31,000
Byron	65	26.5m to 28m from Lismore	Deviation C	42,460
Canobolas	573	15m to 19m from Orange	Reconstruction and bitumen surfacing . . C	65,902
Carrathool	80	17.5m to 22.5m south of Hillston	do C	31,998
do	80	25.4m to 29m south of Hillston	do C	39,000
Cobar	61	26m to 36m south of Cobar	do C	38,000
Cockburn	63	14.17m to 16.8m north of Tamworth	Reconstruction and widening C	20,521
Coolah	206	7.4m to 10m west of Dunedoo	Reconstruction and bitumen surfacing . . C	91,750
do	334	5.8m to 10.3m north of Mendooran	Reconstruction C	45,563
Coolamon	543	1.6m to 5m south of Coolamon	Reconstruction and bitumen surfacing . . C	28,000
Coonamble	129	10.9m to 14.3m west of Coonamble	do C	30,000
Crookwell	291	6m to 9.5m south of Crookwell	do C	29,331
Cudgegong	233	22m to 24.95m west of Gulgong	do C	60,000
Culcairn	331	28m to 30m from Culcairn	do C	34,229
Dumaresqu	74	43.6m to 45.7m east of Armidale	do C	30,412
Dungog	101	Bridge over Myall Creek at Dungog	Approaches C	22,000
do	128	12.32m to 14.30m from M.R. No.101	Reconstruction and bitumen surfacing . . C	51,000
Eurobodalla	271	2.67m to 3.15m west of Moruya	do C	25,027
Gilgandra	77	10.4m to 15.5m from Gilgandra	do C	48,058
Goobang	233	4.5m to 8m from Parkes	do C	22,172
Goodradigbee	56	14.6m to 17.2m north of Yass	do C	21,050
Gosford	505	1.85m to 2.66m from M.R. No.336	do C	24,000
Goulburn	79	Auburn Street to Sloane Street, Goulburn	Reconstruction and channelisation . . . C	30,209 †

Appendix No. 3 - continued

COMMONWEALTH AID ROADS FUND - continued

SUMMARY OF EXPENDITURE FROM DEPARTMENT'S FUNDS ON CONSTRUCTION AND RECONSTRUCTION WORKS - continued

CONSTRUCTING AUTHORITY: D indicates Department; C indicates Council

City, Municipal or Shire Area	Road No	Location of Work	Class of Construction	Amount
COUNTRY RURAL AREA - continued				
TRUNK AND ORDINARY MAIN ROADS - continued				
Gundagai	279	1.1m to 3.3m south of Gundagai	Reconstruction and bitumen surfacing . . . C	37,170
Guyra	135	9m to 11m west of Guyra	do . . . C	30,000
Hastings	112	6.7m to 7.2m from S.H. No. 11	do . . . C	24,000
do	112	5m to 6.72m from S.H. No.11 towards Combayne	do . . . C	23,572
Jemalong	238	3.3m to 10m north of Eugowra	do . . . C	41,826
Kyogle	83	6.23 to 9.1m north of Kyogle	do . . . C	49,740
Lachlan	57	20m to 23m south of Condobolin	do . . . C	25,000
do	231	27m to 34.5m from Lake Cargelligo	do . . . C	81,165
do	231	23.42m to 27.93m east of Lake Cargelligo	do . . . C	40,631
Leeton	80	18.42m to 20.95m west of Leeton	do . . . C	50,900
Liverpool Plains	55	11.4m to 13.9m south of Mullaley	do . . . C	73,580
Manning	90	27.9m to Approx. 29m west of Purfleet	do . . . C	70,500
Mitchell	543	5.3m north of Old Narrandera Road to Shire Boundary	do . . . C	21,000
Mulwaree	256	12.6m to 14m from Goulburn	do . . . C	21,800
Murray	341	47m to 50m west of S.H. No. 21	do . . . C	44,200
Namoi	343	6.26m to 9.5m west of Wee Waa	do . . . C	80,000
Newcastle	108	North arm of Hunter River	Reinforced concrete bridge D	1,006,192 † †
Oberon	253	2.9m to 7.3m East of Oberon	Gravelling, bitumen surfacing and subsidiary works C	40,000
do	256	17.6m to 21.2m south of Oberon	Reconstruction C	64,000
Patrick Plains	213	4.4m to 5.7m from M.R. No. 503	do C	30,000
Snowy River	286	4.4m to 8.4m west of Cooma	do C	45,000
Stroud	111	11.2m to 14.6m from S.H. No.10	do C	120,615
Tallaganda	271	11.9m to 15m from Braidwood	Reconstruction and bitumen surfacing . . C	30,000
Terania	65	Boxhill to Clunes 6.73m to 10.46m	do C	111,328
Timbrehongie	89	14.1m to 18.7m south of Narromine	do C	41,522
do	354	8.4m to 11m south of Narromine	do C	21,000
Tomki	544	13.17m to 16.24m from Lismore	do C	79,253
Tumbarumba	282	14m to 19.2m from Tumbarumba	do C	21,018
Turon	54	26.5m to 29.75m north of Bathurst	do C	23,000
Uralla	73	16.7m to 17.75m north of Uralla	Approaches to reinforced concrete box culvert C	37,425
Wakool	319	34m to 36m and 37m to 37.5m north of Barham	Reconstruction and bitumen surfacing . . C	32,000
do	319	15.5m to 20.45m north of Barham	do C	21,100
Walgett	127	From Walgett to Junction of T.R.No 68	do C	31,043
Warren	333	88m to 99.2m north of Warren	do C	37,500
Wellington	206	28.5m to 32m from Dunedoo	do C	26,000
Wentworth	68	21.3m to 35m north of Wentworth	do C	41,000
Yarrowlumla	584	7m to 8.3m south of Queanbeyan	do C	25,000
Total - Trunk and Ordinary Main Roads				\$ 3,605,318
DEVELOPMENTAL ROADS				
Ashford	1257	9.8m to 10.66m west of M.R.No.137	Construction C	7,562
do	1257	7m to 8m west of M.R. No. 137	do C	4,560 *
do	3159	Macintyre River at Bedwell Downs Crossing	Reinforced concrete box culvert C	2,000
Barraba	1208	Rocky Creek 14.7m from Barraba	Prestressed concrete bridge C	16,000
Bellingen	3202	0.7m west of M.R. No. 119	Timber beam bridge C	4,010
Berrigan	1172	3.6m to 13.85m from Tocumwal	Restoration of flood damage C	800
Bingara	3009	Horton River at Elcombe	Steel beam bridge C	2,220
do	3191	12.1m to 15.1m south of Elcombe	Drainage structures and approaches . . . C	220
Bland	1220	Junction with S.H.No. 6 to 17.9m south	Gravelling C	2,500
Bogan	1163	44m to 47m from Nyngan Darouble-Bobbadah Road	Construction C	5,000
do	1163	44m to 72m south of Nyngan	Elimination of causeways C	3,780
Boomi	3168	Mehi River 41.05m from Moree Browns Creek 40.4m from Moree	Concrete bridge and culvert C	22,000
Byron	1043	9m from Mullimbimby	Drainage C	370 *
Canobolas	1219	7.1m to 7.9m from Clifton Grove	Construction C	11,000
do	1219	Beyond 5m from Clifton Grove	do C	4,000
do	1310	Bosche's Creek at 11.4m to Mullion Creek at 13.3m	do C	3,000
do	1310	Bosche's Creek	Reinforced concrete bridge C	30 *
Carrathool	1018	0m to 5.85m from T.R. No.80	Gravel sheeting C	23,100
Cobar	1262	13.8m to 46.4m west of S.H. No.8	Gravelling C	4,000
Cockburn	1032	7.02m to 7.95m east of Limbri	Construction C	521 *
Conargo	3179	Billabong Creek at Conargo	Bridge and approaches C	693

†† For Additional Expenditure see Appendix No. 5 A

* Credit

Appendix No. 3 — continued

COMMONWEALTH AID ROADS FUND — continued

SUMMARY OF EXPENDITURE FROM DEPARTMENT'S FUNDS ON CONSTRUCTION AND RECONSTRUCTION WORKS — continued

CONSTRUCTING AUTHORITY: D indicates Department; C indicates Council

City, Municipal or Shire area	Road no	Location of Work	Class of Construction	Amount
COUNTRY RURAL AREA — continued				\$
DEVELOPMENTAL ROADS — continued				
Coolah	1304	4.5m to 10m east of T.R. No.55	Reconstruction and bitumen surfacing . . . C	24,613 *
do	1304	15.3m to 21m east of T.R. No.55	do C	17,321
do	1304	0m to 10m from T.R. No. 55	Reconstruction C	7,292
do	1304	Cainbil Creek 12.2m east of T.R. No. 55	Reinforced concrete bridge C	6,500
do	1304	Talbragan River at Uarbry	do C	9,040
Coonabarabran	1232	6.57m to 10.95m from S.H. No. 11 towards Yarravilla.	Construction C	8,000
do	1232	East of Coybill Road	do C	7,000
Coonamble	1269	Selected lengths within the Shire	do C	24,000 *
do	3181	Talaga Creek on Road connecting Bombara and Taloon	Causeways C	24,000
Copmanhurst	1179	2.3m to 4.47m north of M.R. No.150	Construction C	32,809
do	1179	16.66m to 18.69m north of M.R. No. 150	do C	2,809 *
do	1179	1.3m to 2.3m from M.R. No. 150	do C	317 *
do	1179	4.5m to 6.6m from M.R. No. 150	Reconstruction C	4,233
Darling	1316	M.R. 405 near Wanaaring to M.R. No. 429 near Willara Crossing	Clearing, formation and drainage works C	20,100
Dungog	3163	8m to 9m north of Dungog	Construction C	6,000
do	3163	Dungog to Gresford 3.25m to 4m	do C	1,162 *
do	3163	4.6m to 5.51m north of Dungog	do C	1,551
do	3163	Between Dungog and Gresford	Concrete box culverts C	389 *
Eurobadalla	1206	5.7m to 6.8m from M.R. No.560	Construction C	760
do	1206	6.75m to 7.3m from M.R. No. 560	Construction and box culverts C	1,033
Gilgandra	1080	Approx. 8.6m from Castlereagh H'Way at Armatree	Flood and storm restoration C	4,700
do	1080	Tooraweenah Creek	Bridge and approaches C	435 *
Goobang	3137	Bullock Creek	Concrete bridge and approaches C	4,756
Gooodradigbee	1315	0m to 2m from Dicks Creek Road	Reconstruction C	8,000
Gundurimba	1312	From Tuckean Island to Cedar Island	Construction C	14,156
Guyra	1254	Ward's mistake to approximately 15m west of Nowlands Creek	do C	10,000
do	3212	13.5m to 14.5m west of Junction with S.H. No. 9 and M.R. No. 135	do C	12,000
Hastings	3177	Bulli Creek Road	Culverts C	1,650
Imlay	1045	0.45m to 13m from Kiah to Lower Towamba	Widening C	56
Jindalee	3204	9m to 10m from T.R. No. 87	Construction C	1,160 *
Kyeamba	3167	0.8m north of S.H. No. 14	Culvert C	56 *
dp	3167	Tarcutta Creek, 62m to 87m north of S.H. No. 14	Concrete bridge and approaches C	73
do	3203	1.12m to 2.20m from Shire Boundary	Reconstruction of gravel pavements . . C	25,000
do	3203	0m to 2.2m north of Holbrook Shire Boundary	Construction C	25,000 *
Lachlan	1187	0.5m to 5.52m from T.R. No. 61	Gravelling C	5,000
do	1187	5.52m to 10.52m from T.R. No. 61	do C	5,000 *
do	1187	20.5m to 25.5m from T.R. No. 61	do C	7,000
do	1187	15.5m to 20.5m from T.R. No. 61	do C	1,832
do	3115	10m to 10.7m from M.R. No. 347	Box culverts C	4,000
Macleay	1245	8.4m to 10.9m from S.H. No. 10	Construction C	4,360
do	1245	Esk River to Woody Head	Construction and approaches C	4,360 *
Macleay	1048	3.7m to 5.28m from T.R. No.75	Construction C	2,704 *
do	1266	Seale Road	do C	60,000
Manning	1150	Between Cundle Flat and Lower Tigras	Deviation C	385
do	1209	Bridge over Cooplacurripa River	Approaches C	214 *
do	3194	34.75m to 35m from Taree	Construction C	29
Merriwa	1304	Curryall to Shire Boundary	do C	3,500
do	1304	East of Curryall	Reconstruction C	50,000
Molong	1174	1.9m to 4.9m west of Obley	do C	4,701
Monaro	1268	27m to 28m from Kybeyan River	Clearing C	4,000
do	3178	3.6m to 5.8m, 9.4m to 10.4m and 11.3m to 12.25m from S.H. No.4	Construction C	2,000
Mumbulla	1221	0m to 0.33m east of Greendale Bridgd	do C	752 *
Murray	1272	0m to 3.5m from D.R. No. 1236	Formation and gravelling C	2,920
Murrurundi	3213	Yarramanbah Creek on Blackville Road	Reinforced concrete bridge C	19,000
Nambucca	1075	Within the Shire	Restoration of flood damage C	1,583
do	1078			
Namoi	1182	22m to 28m from Narrabri	Widening C	298
Nymboida	3201	Dandhra Creek to Broadwater	Construction C	4,376 *
Peel	1275	Duffs Gully at 1.95m from M.R. No. 130	Construction of bridge C	30,000
do	1298	4.51m to 6.78m from M.R. No.130	Construction C	471 *
Port Stephens	3209	2.65m to 5.32m from M.R. No. 294	Reconstruction and bitumen surfacing . C	4,484 *
Scone	1243	0m to 3.1m from Page's Creek Road	Reconstruction C	10,000

* Credit

Appendix No. 3 — continued

COMMONWEALTH AID ROADS FUND — continued

SUMMARY OF EXPENDITURE FROM DEPARTMENT'S FUNDS ON CONSTRUCTION AND RECONSTRUCTION WORKS — continued

CONSTRUCTING AUTHORITY: D indicates Department; C indicates Council

City, Municipal or Shire Area	Road No	Location of Work	Class of Construction	Amount
COUNTRY RURAL AREA — continued				\$
DEVELOPMENTAL ROADS — continued				
Severn	1207	2.5m north of S.H. No. 12	Reinforced concrete bridge and approaches C	33
do	1311	13.95m to 14.15m, & 25m to 26.5m from S.H. No. 12 towards Deepwater	Formation and drainage. C	30,000
Shoalhaven	1246	2m to 3.34m from S.H. No. 1	Construction C	7,784 *
do	1246	3.3m to 5m south of Burrill Creek Bridge	do C	7,783
Snowy River	1297	Jacobs Ladder to Willis at Victorian Border	Reconstruction C	15,000
Tomki	1125	Mongogarie Creek at Sheehan's Crossing	Construction of bridge C	10,000
do	1125	Mongogarie Creek at Collissons	Prestressed concrete bridge C	2,559 *
Tumbarumba	1117	14.4m to 17.2m north of Tumbarumba	Construction C	15,200 *
do	1117	Tarcutta Creek 3.72m from T.R. No.85	Reinforced concrete bridge C	34,212
do	1171	Spring Creek	Reinforced concrete box culvert C	974
do	1226	Tarcutta Creek	Reinforced concrete bridge and approaches C	12,551 *
Tumut	1215	17.51m to 19.51m from S.H. No.4	Construction C	620 *
do	1215	22.52m to 25m south of S.H. No.4	do C	18,000
do	1215	13.16m to 17.5m from S.H. No. 4	do C	1,633
Tweed	3172	Bridges over Tyalgum and Hopping Dicks Creek	Construction of bridges C	595
Uralla	3186	8.5m to 9.9m east of T.R. No. 73	Construction C	1,521
Wade	1308	7.5m to 11m from Griffith	Forming and gravelling C	1,030 *
Wakool	1106	Edward River to Murgal	do C	674 *
do	1240	Nacurrie to Gonn Crossing	Formation and gravelling C	4,260
do	1293	T.R. No. 67 to M.R. No. 386	Construction C	86 *
Walcha	1227	East of Mukki Creek towards Nowendoc	do C	5,532
do	1317	13.5m south of Walcha towards Topdale	do C	14,410
Wellington	1310	9.2m to 11.2m from Euchareena	do C	10,448
do	1310	Sawyers Creek	Reinforced concrete box culvert and approaches C	10,000
Wentworth	1296	Pooncarrie to Shire Boundary 3.4m south of Darnick Section C.	Reconstruction C	38,750
do	1296	Pooncarrie to Shire Boundary	Clearing, forming and gravelling C	70,284 *
do	1296	2.18m to 13.84m East of Pooncarrie	Reconstruction C	48,534
Wollondilly	1302	3.6m to 5.6m from M.R. No.259	Reconstruction and bitumen surfacing . . . C	4,027
Yallaroi	1270	10m to 13.3m north west of Warialda	Construction C	651 *
do	1270	13.3m to 18m north west of Warialda	do C	69 *
Total - Developmental Roads				\$ 591,714

SUMMARY

Expressways	\$ 10,908,939	\$
State Highways	13,981,520	
Trunk and Ordinary Main Roads	<u>11,981,771</u>	36,872,230
Secondary Roads		254,352
Developmental Roads		591,714
Roads Other than Main Roads		<u>1,521,619</u>
		39,239,915
Survey, Design, Supervision etc.		882,997
Maintenance and Construction of Unclassified Roads in the Western Division		<u>235,995</u>
Total as shown in Receipts and Payments Statements — Appendix No. 1 (A).		\$40,358,907

Appendix No. 4

COUNTY OF CUMBERLAND MAIN ROADS FUND — GENERAL PURPOSES

SUMMARY OF EXPENDITURE FROM DEPARTMENT'S FUNDS ON CONSTRUCTION AND RECONSTRUCTION WORKS

CONSTRUCTING AUTHORITY: D indicates Department; C indicates Council

City, Municipal or Shire Area	Road No	Location of Work	Class of Construction	Amount
STATE HIGHWAYS				\$
Princes Highway				
Sutherland	1	Railway Overbridge south of Loftus	Approaches D	37
do	1	Holt Road to Acacia Road	Dual carriageway D	394
Wollongong	1	Intersection with M.R. No. 185	North-bound passing lane D	12,405
do	1	Waterfall Deviation 27.27m to 30m south of Sydney	Resheeting asphaltic concrete D	708 *
				\$ 12,128
Hume Highway				
Bankstown	2	Intersection with Brunker Road	Channelisation D	4,553
Camden	2	Bridge over Nepean River at Camden	Deviation and northern approach D	135 *

* Credit

Appendix No. 4 — continued

COUNTY OF CUMBERLAND MAIN ROADS FUND — GENERAL PURPOSES — continued
SUMMARY OF EXPENDITURE FROM DEPARTMENT'S FUNDS ON CONSTRUCTION AND RECONSTRUCTION
WORKS — continued

CONSTRUCTING AUTHORITY: D indicates Department; C indicates Council

City, Municipal or Shire Area	Road No	Location of Work	Class of Construction	Amount
STATE HIGHWAYS — continued				\$
Hume Highway — continued				
Camden	2	Bridge over Nepean River at Camden	Widening D	13
Fairfield	2	Prospect Creek to Cabramatta Creek	Strengthening of pavement . . . D	84
do	2	Prospect Creek to Cabramatta Creek	Kerbside lanes D	17
Liverpool	2	Intersection with M.R. No. 515 and S.R. No. 2071	Channelisation D	9,542
do	2	Hoxton Park Turnoff	Dual carriageway D	33
do	2	Marsh Parade to Casula Road	Construction of side strips D	683
do	2	Scott Street to Elizabeth Drive	Resheeting D	1,913
do	2	Warwick Farm Overbridge to Cabramatta Creek	Kerb and gutter D	131
do	2	Water Board Pipe Line to Camden	Resheeting D	693
Strathfield	2	Cooks River Bridge to Pemberton Street	Kerbside lanes D	5,857
do	2	Cooks River to S.R. No. 2087	Kerbside lane D	237
				\$ 23,621
Great Western Highway				
Auburn	5	Day Street to Haslams Bridge	Reconstruction and drainage of failed pavement D	42,174
do	5	Railway Overbridge to King Avenue Southern Carriageway	do D	619
do	5	Intersection with M.R. No. 532	Improvement D	150
do	5	Railway Overbridge to King Avenue	Drainage and pavement construction D	558 *
do	5	King Avenue to Haslam's Creek	Reconstruction and drainage of failed pavement D	1,618
do	5	Day Street to Silverwater Road	Drainage D	40
Blacktown	5	19.17m to 19.98m west of Sydney	Deviation D	44
do	5	Eastern Creek, 23.6m west of Sydney	Drainage improvement D	3,757
do	5	Eastern Creek	Steel and concrete bridge D	4,437
Blue Mountains	5	St. Georges Crescent to Parkes Crescent, Faulconbridge	Reconstruction D	2,064
do	5	Junction with Kings Tablelands Road Wentworth Falls	Improvement D	121
Springwood	5	Springwood	Deviation D	1,073
do	5	Ross Street, Glenbrook	Passing lanes and improvement of intersection D	180
do	5	2m to 2.5m west of Katoomba	Climbing lane D	5,845
do	5	17.4m to 30.5m west of Penrith-3.8m to 8.7m west of Katoomba	Reshaping and strengthening of selected sections D	8,020
do	5	11.3m to 12m west of Katoomba	Climbing lane D	424
do	5	Intersection with Cascade Street, Katoomba	Reconstruction D	3,583
do	5	3.46m to 3.70m west of Katoomba	Reconstruction and bitumen surfacing D	853
Burwood	5	Intersection with Shaftesbury Road	Improvement and kerb and gutter . D	374
Holroyd	5	No. 559 SH 5 to Culvert near Hackney Street, Pendle Hill	Piping of open drain D	243
do	5	Bridge Street to Station Street Wentworthville	Reconstruction D	1,486
Parramatta	5	Intersection with S.R. No. 2049	do D	1,458
Penrith	5	Bound Creek 30.1m west of Sydney	Widening to four lanes D	4,145
do	5	Near Cary Street, Emu Plains	Twin culverts D	1,428
do	5	Intersection with Mulgoa Road	Improvement D	9,418
do	5	Evans Street to Henry Street West	Asphaltic concrete surfacing . . . D	84
do	5	Emu Plains	Kerb & guttering C	961
				\$ 94,041
Pacific Highway				
Hornsby	10	Western Kerbside Lane near Judith Street, Mt. Colah	Bitumen surfacing D	1,467 *
do	10	Mt. Ku-ring-gai to Berowra	Reconstruction and widening . . . D	3,344
do	10	Mt. Colah Railway Station	Kerb and gutter D	110
do	10	At Asquith	Reconstruction of failed pavement D	3,363
Ku-ring-gai	10	Ryde Road to Livingstone Avenue	Reconstruction and widening . . . C	6,870
Lane Cove	10	Intersection with Greenwich Road St. Leonards	Channelisation D	36
Willoughby	10	Intersection with Mowbray Road	do D	34 *
				\$ 12,222
State Highway No. 13				
Bankstown and Fairfield	13	Villawood	Railway overbridge D	6,764
Baulkham Hills and Parramatta	13	Carlingford Road Overbridge to Felton Road	Reconstruction D	3,520
Holroyd and Parramatta	13	Railway level Crossing at Granville	Underpass D	10,136
Holroyd and Parramatta	13	Railway underpass at Granville	Batter protection D	37,929
Hornsby	13	Thompson Corner to Beecroft Road	Asphaltic concreting D	6,606
do	13	Thompson Corner to Carlingford Road	Reconstruction D	1,558
Parramatta	13	Macquarie St. to Lennox Bridge	Drainage D	2,976

* Credit

Appendix No. 4 — continued

COUNTY OF CUMBERLAND MAIN ROADS FUND — GENERAL PURPOSES — continued
SUMMARY OF EXPENDITURE FROM DEPARTMENT'S FUNDS ON CONSTRUCTION AND RECONSTRUCTION
WORKS — continued

CONSTRUCTING AUTHORITY: D indicates Department; C indicates Council

City, Municipal or Shire Area	Road No	Location of Work	Class of Construction	Amount
STATE HIGHWAYS — continued				\$
Great Western Highway — Continued				
Parramatta and Baulkham Hills	13	Bettington Road to Tintern Avenue	Kerbside lanes D	36,613
Parramatta and Baulkham Hills	13	Railway Overbridge at Carlingford to Tintern Avenue	Widening D	3,748 *
Parramatta and Baulkham Hills	13	Intersection with M.R. No. 158 at Mobbs Hill	Improvement D	185
Parramatta and Baulkham Hills	13	Evans Road to Carlingford Overbridge	Reconstruction D	2,436
Parramatta Bankstown and Fairfield	13	Chiltern Road to Hume Highway	Widening and reconstruction D	148
Parramatta	13	Merrylands Road to Parramatta Rd.	Dual carriageway D	503
Parramatta	13	Merrylands Road to Parramatta Road	Reconstruction and widening C	12,081
Parramatta Bankstown and Fairfield	13	Sydney Water Supply Main	Prestressed concrete bridge D	6
				\$ 117,713
Total — State Highways				\$ 259,725
ORDINARY MAIN ROADS				
Auburn	190	The Boulevard to James Street	Reconstruction C	34
do	190	St. Hilliers Road to Wyatt Park	do C	20,000 *
Bankstown	167	Intersection with M.R. No. 508	Channellisation D	515
do	167	Victoria Street to M.R. No. 508	Reconstruction and widening D	680
Baulkham Hills and Hornsby	156	Near Church Street & New Line Road	Reconstruction C	305
Baulkham Hills	160	Junction with Telfer Road, Castle Hill	do C	710
do	160	Rogans Hill to Glenhaven Road	Reconstruction and realignment C	3,627
do	160	Old Northern Road at Dural Public School	Improvement C	1,000
do	184	Bridge over First Ponds Creek	Approaches D	6,932
do	184	Intersection with Annangrove Road	Improvement D	1,948
Baulkham Hills and Parramatta	184	0.37m west of Hunts Creek towards Windsor	Reconstruction and provision of side strips D	166
Baulkham Hills	184	Kellyville	Widening D	2,815
do	184	President Avenue to Acres Road Kellyville	Reconstruction and widening D	3,147
do	184	President Road to Acres Road	Reconstruction C	136
Blacktown	537	Mavis Street to Church Street	do C	4,839
do	537	S.H. No. 5 to Mavis Street, Rooty Hill	Reconstruction and bitumen surfacing C	5,000
do	546	Culvert near Clarke Street	Guardrail C	294
Blue Mountains	184	28.7m to 29.8m west of Windsor	Climbing lane D	252,469
do	184	36m to 41m west of Windsor	Reconstruction and improvement to drainage D	47,144
do	570	Silva Road to Paterson Road Springwood	Widening C	2,500
Botany	170	Over Millpond Creek	Reinforced concrete bridge D	9,405
Botany and Randwick	171	Intersection with Beauchamp Road	Traffic signal installations D	2,636
Botany	183	Near Florence Avenue	Pedestrian underpass D	19
do	344	Southern Cross Drive to Bay Street	Dual carriageway D	1,459
do	593	Internal Access to The Lakes Golf Club	Reinforced concrete subway D	1,459
do	344	Botany Road to Dransfield Avenue	Reconstruction D	2,820
do	344	Page Street to Baker Street	do C	221
do	593	Over King Street	Reinforced concrete bridge D	24
Camden	178	Kenny Hill 1.8m to 2.17m west of Campbelltown	Climbing lane D	386 *
Campbelltown	177	Allman Street to M.R. No. 178	Reconstruction D	62 *
do	177	8.43m to 8.55m east of S.H. No.2	Reconstruction & bitumen surfacing D	386
do	177	9.37m to 9.85m south of S.H. No.2	do D	8,116
do	179	Bridge over Water Race Creek	Approaches C	1,092 *
do	179	2m to 2.3m from M.R. No. 178	Improvement and widening C	8,000
Colo and Windsor	184	Bridge over Hawkesbury River at North Richmond	Widening D	6,984
Colo	184	Foot of Kurrajong Hill	Widening of reverse curves D	26,059
Fairfield	515	Intersection of Meadows Road	Widening and drainage D	1,794
do	515	Meadows Road Mt. Pritchard	do C	238
do	534	Town View Road to Cabramatta Golf Links	Kerb and gutter C	181
do	534	Railway overbridge at Cabramatta	Approaches C	6,488
do	534	Anderson Street and Meadows Road Mt. Pritchard	Drainage C	1,376
do	534	S.H. No. 2 to Cumberland Street Cabramatta	Reconstruction C	2,543
Hornsby	156	S.H. No. 13 to New Line Road	Kerbside lanes and drainage C	7,500
do	161	Intersection with Calderwood Road	Improvement C	122
do	161	Intersection with Calderwood Road	Improvements C	122 *
do	373	Beecroft Road to Pennant Parade Epping	Reconstruction and widening C	26,713
Hornsby and Parramatta	373	Midson Road to Ray Road	Reconstruction C	37,646
Hornsby	548	0.3m to 1.4m west of Galston	Deviation and bitumen surfacing C	39,100

* Credit

Appendix No. 4 — continued

COUNTY OF CUMBERLAND MAIN ROADS FUND — GENERAL PURPOSES — continued

SUMMARY OF EXPENDITURE FROM DEPARTMENT'S FUNDS ON CONSTRUCTION AND RECONSTRUCTION WORKS — continued

CONSTRUCTING AUTHORITY: D indicates Department; C indicates Council

City, Municipal or Shire Area	Road No	Location of Work	Class of Construction	Amount
ORDINARY MAIN ROADS — continued				\$
Hornsby	548	Mid Dural Road	Reconstruction C	7,282
do	587	Bridge Road to Asquith	do D	3,340
Hurstville	168	Jersey Ave to Scott St & Mavis Ave To S.R. No. 2041	Widening and kerb and gutter C	464
do	168	Edith Street, Lugarno	Stormwater drainage C	2,000
do	508	Forest Road to Hymen Street	Reconstruction C	604
do	508	Intersection with S.R. No. 2050	Improvement C	353 *
do	508	Northern Side Ogilvy Street to Belmore Road	Kerb and gutter C	25
Lane Cove and Willoughby	373	Lane Cove River to Moore Street	Widening D	2,276
Leichhardt	165	Hornsey Street to Quirk Street	Adjustments to median D	1,378
Liverpool	512	Intersection with Junction Road	Provision of concrete pipe culvert . . . D	7,363
do	512	Intersection with Centenary Avenue	do D	1,119
do	512	Church Road to Artillery Crescent	Passing lanes D	14,995
Liverpool and Fairfield	515	Mt Pritchard	Climbing lane D	1,188
Manly	159	Intersection with Raglan Street	Improvement C	696
do	159	Intersection with Raglan Street Manly	Improvement and channelisation C	6,000
do	159	Between Crescent Street and Belgrave Street	Reconstruction C	5,000
North Sydney	599	Falcon St to Suspension Bridge, Cammeray	do C	1,140
Parramatta	139	Epping Railway Station	Pedestrian footbridge C	4,200
do	574	Kirby Street, Dundas	Reconstruction and pavement widening . D	1,339
Penrith	154	Intersection with Ninth Avenue, Llandilo	Construction C	1,000
do	154	Parker Street, near St. Dominic's College	Kerb and gutter C	4
do	155	Surveyors' Creek, 1.35m from State Highway No 5	Prestressed concrete bridge C	921 *
do	155	Bridge over Surveyor's Creek at Penrith	Approaches C	3,800
Randwick	593	Access to the Australian Golf Club	Reinforced concrete bridge D	2,678
do	593	Over Epon Road	do D	4,993
Rockdale	194	Intersection with Bestic Street	Right-turn lane D	70,000 *
Ryde	139	Blaxland Road to Lane Cove Road	Reconstruction D	3,181
do	165	0.05m to 0.25m east of Marsden Road	Asphaltic concreting D	1,158 *
do	165	Western Carriageway near Falconer Street	Restoration of failed pavement D	1,078
do	165	Arras Parade to Charles Street	do D	2,716 *
do	165	Ryedale Road to West Parade	Asphaltic concreting. D	381
do	165	Pittwater Road to Monash Road Gladesville	Reconstruction of damaged pavement . . D	24,297
Ryde and Hunter's Hill	165	Intersection with Pittwater Road Gladesville	Median adjustment D	300
Ryde	165	Intersection with Creasy Road, Ryde	do D	357
do	200	Junction Street to Victoria Road	Asphaltic concreting D	218
Ryde and Hornsby	373	Terry's Creek 5.78m from S.H.No. 10	Reinforced concrete bridge. D	921
Strathfield and Burwood	315	Redmyre Road to Raw Square	Deviation C	9,948
Strathfield and Burwood	315	The Boulevarde, South of Redmyre Road	Central median strip C	488
Sutherland	227	Jacaranda Road to Green Street	Reconstruction and widening C	3,372
do	393	Causeway across Port Hacking River near Waterfall	Flood free deviation. D	15,091
Sydney	592	Cahill Expressway at Art Gallery	Mass retaining wall D	49,760
Warringah	159	Hillcrest Place to Harbord Road	Widening C	11,153
do	162	Alan Street to Pittwater Road Mona Vale	Reconstruction D	8,470
do	174	McCarr's Creek Road	Provision of bus turning facilities C	115
do	328	Intersection with Forest Way, Frenchs Forest	Pedestrian overbridge approaches D	4,848
do	328	Over Forest Way	Pedestrian overbridge D	312
do	530	Harbord Lagoon to Pacific Parade	Widening C	1,694
do	530	Lawrence Street to Surfers Parade	Reconstruction and sealing of side strips . C	4,000
Willoughby	599	Warners Avenue to Edinburgh Road	Widening of kerbside lane D	164
Windsor	184	McQuade Park, Windsor	Strengthen and seal kerbside lane D	2,472
do	184	North Richmond Bridge	Approaches D	6,149 *
do	184	Moray Street to Paget Street, Richmond	Drainage D	85
Windsor and Colo	184	Approaches to North Richmond Bridge	Protective treatment to levy banks . . . D	136
Windsor	184	Moray Street to Paget Street, Richmond	Kerb and gutter C	525
do	537	Bourke Street to East Market Street Richmond	Reconstruction D	18,930
Woollahra	172	Northern Side Queen Street to Grosvenor Street	Construction C	1,600
do	173	Intersection with Russell Street	Reconstruction C	2,504
do	173	North from Sassafra Lane on western side.	Reconstruction of road shoulders C	2,200
Total — Ordinary Main Roads				\$ 662,661

Appendix No. 4 – continued

COUNTY OF CUMBERLAND MAIN ROADS FUND – GENERAL PURPOSES – continued
SUMMARY OF EXPENDITURE FROM DEPARTMENT'S FUNDS ON CONSTRUCTION AND RECONSTRUCTION
WORKS – continued

CONSTRUCTING AUTHORITY: D indicates Department; C indicates Council

City, Municipal or Shire Area	Road No	Location of work	Class of Construction	Amount
SECONDARY ROADS				
Ashfield and Leichardt	2056	Bridge over Hawthorne Canal	Approaches D	294
Ashfield	2064	Intersection with Bland Street	Reconstruction C	469 *
Bankstown	2068	Canterbury Road to Thorn Street, Revesby	do C	141
do	2068	Railway Underpass to Tower Street	do C	352
Baulkham Hills	2084	0.64m west of Katherin Street	Reconstruction of pavement C	1,730
Blacktown	2084	Intersection with Abbott Road, Seven Hills	Reconstruction C	223 *
do	2084	Seven Hills Road North	Median strip closure C	500
do	2085	Pedestrian Crossing at Prospect	Kerb and gutter C	654
do	2085	Intersection of Patrick Street and Kildare Street	Adjustments to provide for installation of traffic signals C	223
Burwood	2027	Paisley Road Burwood	Reconstruction C	193
Canterbury	2021	Bexley Road to King Georges Road	do C	5,000
Fairfield	2088	Hume Highway to Bennett Avenue Carramar	Kerbing and guttering C	121
Hunters Hill and Ryde	2033	Intersection with Pittwater Road	Reconstruction C	2,283
Ku-ring-gai	2043	Bancroft Avenue to Tryon Road	do C	640
Lane Cove	2070	William Edward Street to Longueville Road	Reconstruction and widening C	3,000
do	2070	Northside between Canberra Avenue† and Anglo Road	Reconstruction C	6,000
do	2070	Burns Bay Road to Bridge Street	Reconstruction and widening C	8,870
do	2070	Canberra Avenue to Angle Road	Reconstruction C	436
do	2070	Tambourine Bay Road to Wangalla Road	do C	1,379
do	2070	Tambourine Bay Road to Warraroon Road	do C	2,752
do	2070	Warraroon Road to William Edward Street	do C	8,306
do	2070	Gore Creek to Northwood Road	do C	894
Leichhardt	2046	Mary Street to Balmain Road	do C	10,250
Liverpool	2071	Elizabeth Drive to Cabramatta Creek	do C	2,067
Marrickville	2007	Stanmore Road to Addison Road Petersham	Reconstruction and bitumen surfacing. C	20,000
do	2028	Junction with Gordon Street Petersham	Channelisation C	280 *
North Sydney	2019	Western side North from High Street	Widening C	1,042
Parramatta	2049	Church Street to Wentworth Street	Reconstruction C	448
do	2066	Campbell, O'Connell and Albert Streets	do C	3,600
Penrith	2063	Rickabys Creek Windsor	Widening C	464
Rockdale	2014	Forest Road to Frederick Street	Reconstruction C	854
do	2080	Ramsgate Road to Sandringham Street	Kerbside Lane C	4,000
South Sydney	2083	Phillip Street to Cooper Street	Reconstruction C	11,043
Strathfield	2057	Fraser Street to Mitchell Road	do C	5,168
do	2057	Henley Road to Municipal Boundary	do C	11,300
Sutherland	2075	Intersection with Gympie Bay Road	Installation of traffic signals C	641
do	2075	Willarong Road south to Kiora Road	Widening and sealing of side strips C	33,000
Total – Secondary Roads				\$ 146,673
TOURIST ROADS				
Baulkham Hills	4006	8m to 8.4m from Webbs Creek Ferry	Reconstruction C	5,000
do	4006	Five Sections between 3.15m and 13.35 from Webbs Creek Ferry	Reconstruction and bitumen surfacing C	34,064
do	4006	9.2m to 10.7m and 11.45m to 13.35m from Wiseman's Ferry	Gravelling and bitumen surfacing C	10,000 *
Blue Mountains	4004	S.H. 5 to Mount York	Reconstruction and bitumen surfacing C	3,000
do	4019	1.6m to 2.6m from S.H. No. 5	do C	2,500
Total - Tourist Roads				\$ 34,564
ROADS OTHER THAN MAIN ROADS				
Bankstown		Stacey Street from Old Kent Road To S.H. No. 2	Reconstruction D	746
Botany		Amelia Street Underpass to Botany Road	Reconstruction and widening D	3,361
Hunters Hill		Nemba Street to Church Street	Access road D	49,235
Ku-ring-gai and Hornsby		Pennant Hills Road at Parkes Street to Fox Valley Road	Construction and bitumen surfacing C	5,000
Liverpool		Sydney Road and Copeland St between S.H. No. 2 and Campbell Street	Reconstruction D	56
Parramatta		Intersection of Spurway Street and Bennetts Road	do D	140
Penrith		Russell Street from Western Expressway to S.H. No. 5	Reconstruction including intersection with S.H. 5 D	3,525
Rockdale		Cooks River at Marsh Street	Prestressed concrete bridge D	323,334
Ryde		Brush Farm Road, Eastwood to Marsfield	Construction C	752
Willoughby		Alpha Road from French's Road to Edinburgh Road	Widening and resealing D	2,680

* Credit

† For Additional Expenditure see Appendix No. 3A

Appendix No. 4 — continued

COUNTY OF CUMBERLAND MAIN ROADS FUND — GENERAL PURPOSES — continued
SUMMARY OF EXPENDITURE FROM DEPARTMENT'S FUNDS ON CONSTRUCTION AND RECONSTRUCTION
WORKS — continued

CONSTRUCTING AUTHORITY: D indicates Department; C indicates Council

City, Municipal or Shire Area	Road No	Location of Work	Class of Construction	Amount
ROADS OTHER THAN MAIN ROADS — continued				\$
Willoughby		Brook Street to Alpha Road	Construction D	16,896
			Total — Roads other than Main Roads	\$ 307,255

SUMMARY

State Highway	\$ 259,725	\$
Ordinary Main Roads	<u>662,661</u>	922,386
Secondary Roads		146,673
Tourist Roads		34,564
Roads Other than Main Roads		307,255
		<u>1,410,878</u>
Survey, Design, Supervision, Planning etc.		3,561,305
Total as shown in Receipts and Payments Statements — Appendix No. 1 (B) (i)		4,972,183

Appendix No. 4A

COUNTY OF CUMBERLAND MAIN ROADS FUND — SPECIAL PURPOSES
SUMMARY OF EXPENDITURE FROM DEPARTMENT'S FUNDS ON CONSTRUCTION AND RECONSTRUCTION
WORKS

City, Municipal or Shire Area	Road No	Location of Work	Class of Construction	Amount
CONSTRUCTING AUTHORITY: D indicates Department; C indicates Council				\$
EXPRESSWAYS				
Warringah Expressway				
North Sydney	X1	Section 1 Warringah Expressway	Construction D	53,628
				\$ 53,628
Sydney-Newcastle Expressway				
Hornsby	X3	New Bridge over Hawkesbury River	Reinforced concrete sub-structure D	372,047 †
do	X3	do	Reinforced concrete super-structure . . . D	106,577 †
do	X3	do	Rock fill for extension of abutments . . D	29,191 †
do	X3	26.6m to 30.4m north of Sydney	Construction D	2,345
				\$ 510,160
Western Expressway				
Penrith	X4	Regentville to St Marys	Construction D	1,500,000
				1,500,000
Southern Expressway				
Wollongong	X6	31.59m south of Sydney	Twin reinforced concrete bridges D	175,625
do	X6	Over S.H. No 1, 30.25m south of Sydney	do D	181,718
do	X6	Waterfall to Bulli Pass 27m to 34m south of Sydney	Construction D	3,110,468
				\$ 3,467,811
Eastern Distributor				
Sydney	X7	Conservatorium to Sir John Young Crescent	Construction C	24,317
			Total — Expressways	\$ 5,555,916
ROADS OTHER THAN MAIN ROADS				
Rockdale		Bridge over Cooks River at Arncliffe	Eastern Approaches D	40,359
			Total - Roads other than Main Roads	\$40,359

SUMMARY

Expressways	\$ 5,555,916	\$
Roads other than Main Roads	<u>40,359</u>	
Total as shown in Receipts and Payments Statements — Appendix No. 1 (B) (ii)		\$ 5,596,275

† For additional expenditure see Appendix No. 5A

Appendix No. 5

COUNTRY MAIN ROADS FUND – GENERAL PURPOSES

SUMMARY OF EXPENDITURE FROM DEPARTMENT'S FUNDS ON CONSTRUCTION AND RECONSTRUCTION WORKS

CONSTRUCTING AUTHORITY: D indicates Department; C indicates Council

City, Municipal or Shire Area	Road No	Location of Work	Class of Construction	Amount
EXPRESSWAYS				
Southern Expressway				\$
Wollongong	X6	Porter Street extension	Dual carriageway.	D 1,888
do	X6	Mt Keira Bridge to Gladstone Avenue	do	D 2,818
do	X6	0.19m to 0.59m south of M.R. 513	Additional lane	D 6,185
do	X6	Byarong Avenue 2.5m south of Wollongong	Temporary pedestrian overbridge	D 134
do	X6	Porter Street	Prestressed concrete overbridge	D 1,796 *
do	X6	Allan Creek at Unanderra	Reinforced concrete box culvert	D 2,400 *
do	X6	Porter Street Extension	Prestressed concrete overbridge	D 1,966
				\$8,795
Total - Expressways				\$8,795
STATE HIGHWAYS				
Princes Highway				
Bega	1	Swan Street to Union Street	Reconstruction	D 21,778
do	1	Bega by-pass	Construction	D 4,104
do	1	Bega River at North Bega	Prestressed concrete bridge	D 158
Eurobodalla	1	0.08m to 9.85m south of Narooma	Reconstruction	D 3,578
Imlay	1	Junction with Edrom Road 16.5m south of Eden	Climbing lane	D 2,531
do	1	Victorian Border	Deviation	D 10,000
Kiama	1	South of Toolyooa turnoff	Reconstruction	D 52,472
Mumbulla	1	Quaama, 31.2m to 32.6m south of Narooma	Deviation	D 10,229
Shellharbour	1	Oak Flats Railway Station	do	D 14,537
Shoalhaven	1	Intersection with M.R. No. 312	Temporary improvement	D 834
do	1	Intersection with Illaroo Road	Adjustment to kerb lane	D 2,563
do	1	Bomaderry Hill, 99.26m to 99.51m south of Sydney	Climbing lane	D 30,883
do	1	Abernethy's Creek 97m to 97.5m south of Sydney	Improvement to alignment	D 75,889
Wollongong	1	Intersection with Northcliff Drive, 5.5m south of Wollongong	Bitumen surfacing	D 26
do	1	6.39m to 6.55m north of Wollongong	Kerbside lanes	C 1,533
do	1	McCabe Street to Avondale Road Dapto.	do	C 20,682
do	1	46.41m to 46.86m south of Sydney	do	C 2,500
do	1	Black Cutting Hill 47m south of Sydney	Retaining wall and improvements	C 17,374
do	1	Broker Street to Colliery Entrance Russell Vale	Strengthening	C 1,233
do	1	Ghost's Creek	Prestressed concrete super-structure	D 160
do	1	Mullett Creek 7m south of Wollongong	Prestressed concrete bridge	D 35,655
				\$ 308,719
Hume Highway				
Albury	2	Intersection with Mate, Young and North Streets, Albury	Improvement	D 2,202
Camden	2	2m to 2.8m south of Camden	Widening	D 145,800
do	2	Bridge over Nepean River at Camden	Southern approaches	D 36
Goodradigbee	2	Bowning Deviation 7.5m to 9m west of Yass	Dual carriageway	D 42,573
do	2	17.8m to 20m south west of Yass	Reconstruction	D 6,319
do	2	15.57m to 22.57m south of S.H.No.15	Realignment and reconstruction	D 9,256
Goulburn City and Mulwaree	2	Goulburn to S.H. No.3	Reconstruction	D 26,348
Goulburn	2	Intersection with Auburn, Bourke and Cowper Streets	Channelisation	C 49,000
Gundagai	2	Gundagai and South Gundagai	Railway level crossings	D 977
do	2	Level crossing at Coolac	Approaches	D 2,539
Gunning	2	30.2m to 31.4m south of Goulburn	Climbing lane.	D 3,545
do	2	Meadow Creek at Gunning	Temporary bridge and approaches	D 24
Holbrook	2	24.7m to 30.2m south of Tarcutta	Reconstruction and bitumen surfacing	D 9,181
do	2	30.2m to 34.9m south of Tarcutta	do	D 8,302
do	2	24.5m south of Tarcutta	Reinforced concrete box culvert	D 35
do	2	Bridge over Little Billabong Creek 24.2m south of Tarcutta	Approaches	D 2,823 *
Hume	2	Intersection with M.R. No. 370	Reconstruction and widening	D 424
do	2	20m to 20.7m south of Holbrook	Reconstruction and bitumen surfacing	D 18,305 *
do	2	16.8m to 18.3m south of Holbrook	do	D 44,524
Kyeamba	2	Intersection with S.H. No. 14	Improvement	D 3,312
Mittagong	2	Pioneer Street to Gibbergunyah Creek	Reconstruction	D 10,071 *
do	2	37.85m to 38m from Camden	Deviation	D 173
do	2	Cutaway Hill, 4.2m to 5.5m south of Mittagong	do	D 1,075
do	2	White Horse Bridge 13.88m to 14.96m south of Picton	Improvement to southern approach	D 407
do	2	0.21m to 0.45m south of Mittagong	Climbing lane.	D 10,071
Mulwaree	2	North of Yarra	Twin overbridges	D 19,257
do	2	Marulan overbridge	Footway	C 1,585

* Credit

Appendix No. 5 — continued

COUNTRY MAIN ROADS FUND — GENERAL PURPOSES — continued
SUMMARY OF EXPENDITURE FROM DEPARTMENT'S FUNDS ON CONSTRUCTION AND RECONSTRUCTION
WORKS — continued

CONSTRUCTING AUTHORITY: D indicates Department; C indicates Council

City, Municipal or Shire Area	Road No	Location of Work	Class of Construction	Amount
STATE HIGHWAYS — continued				\$
Hume Highway — continued				
Mulwaree	2	39.3m to 41.9m south of Mittagong	Reconstruction and bitumen surfacing . . D	2,890
do	2	41.7m to 46.6m south of Mittagong	do . . . D	6,996
do	2	48.7m to 50.4m south of Mittagong	Reconstruction D	30,684
do	2	Bridge over Boxer's Creek, 5.11m to 5.83m north of Goulburn	Approaches D	140,738
Wingecarribee	2	Comfort Hill 91.3m to 93.2m south of Sydney	Reconstruction D	48,236
Wollondilly	2	55.22m to 60m south of Sydney	Widening and formation D	63,487
do	2	1.5m south of Picton	Extension of reinforced concrete box culvert D	24,552
do	2	4.6m to 7.16m south of Camden	Realignment and climbing lanes D	10,603
do	2	9m to 9.6m south of Camden	Reconstruction D	686
do	2	Razorback mountain 45.16m to 46m south of Sydney	do D	3,559
do	2	47.5m to 48.7m south of Sydney	do D	4,906
				\$ 693,103
Snowy Mountains Highway				
Imlay	4	8.1m to 9.4m west of Tathra	Reconstruction and bitumen surfacing . . D	147,366
Monaro	4	35m to 40m west of Bega	do . . . D	29,768
Mumbulla	4	21.3m to 25.5m west of S.H. No.1	do . . . D	4,115
Mumbulla and Monaro	4	33m to 35m west of S.H. No. 1	do . . . D	12,415
Snowy River	4	8.38m to 13m west of Kiandra	do . . . D	97,728
do	4	4.3m to 6m west of Kiandra	do . . . D	119,776
do	4	22.8m west of Adaminaby to 1.3m west of Kiandra	do . . . D	35,664
do	4	2m to 4.3m west of Kiandra	do . . . D	14,942 *
do	4	1.3m to 2m west of Kiandra	do . . . D	61,080
Tumut	4	27.1m to 32.9m east of Tumut	do . . . D	118,504
do	4	3.8m to 4.23m east of Tumut	do . . . D	2,069
do	4	Copper Street to Winyard Street, Tumut	Deviation D	401
do	4	Blowering Dam	do D	250,000
				\$ 863,944
Great Western Highway				
Bathurst and Turon	5	1m to 9m east of Bathurst	Reconstruction and bitumen surfacing . . D	5,557
Bathurst	5	Intersection with State Highways Nos. 6 and 7	Improvement D	1,813
Blaxland	5	Marrangaroo	Railway overbridge D	131,274
Turon	5	Frying Pan Creek to 26.4m west of Lithgow	Reinforced concrete bridge D	124
				\$ 138,768
Mid Western Highway				
Abercrombie	6	Fitzgerald Mount, 13.0m west of Bathurst	Guard rail D	2,501
Lyndhurst	6	21.4m to 22.5m west of Blayney	Reconstruction and bitumen surfacing . . D	37,122
do	6	3.9m to 6.0m west of Blayney	do . . . D	72,570
do	6	19.6m to 20.6m west of Blayney	Field trial using foamed bitumen plant mix D	13,317
Waugoola	6	182.6m to 183.4m from Sydney (27.0m to 27.8m west of Blayney)	Climbing lane construction C	20,000
Weddin	6	Bridge over Lignum Creek	Widening C	3,800
				\$ 149,310
Mitchell Highway				
Abercrombie	7	11.88m west of Bathurst	Provision for climbing lane D	5,828
do	7	11.5m to 11.8m west of Bathurst	Reclimbing lane D	12,148
Canobolas	7	26.7m to 31.6m west of Bathurst	Reconstruction D	15,098
do	7	28.8m to 31.4m west of Bathurst	Reconstruction and bitumen surfacing . . D	124,728
do	7	25.3m to 26.7m west of Bathurst	do . . . C	5,200
Darling	7	50m to 59m north of Bourke	do . . . D	87,165
do	7	30m to 40m north of Bourke	do . . . D	85,634
do	7	59m to 61.3m north of Bourke	do . . . D	4,819 *
do	7	21m to 30m north of Bourke	do . . . D	27,368 *
do	7	Cuffs Creek 82m north of Bourke	Reinforced concrete bridge D	20,736 *
Dubbo	7	Bridge over Macquarie River	Approaches D	728
Molong	7	6.8m to 8.4m north of Molong	Reconstruction and bitumen surfacing . . D	15,703
do	7	3.9m to 6.8m north of Molong	do . . . D	4,214
do	7	Bridge over Bell River at Claremont	Approaches D	5,703 *
Orange	7	Intersection with T.R. No.61 and M.R. No. 573	Reconstruction D	2,869
Talbragar	7	7m to 12.1m west of Dubbo	Deviation D	65,792
do	7	24.4m to 29m west of Wellington	Reconstruction and widening D	1,365
do	7	Drive-In Theatre at West Dubbo	Turning bays D	10,077
do	7	Dubbo Airport	Turning lanes D	17,107
do	7	19m to 24.4m west of Wellington	Reconstruction and pavement widening . D	54,372

* Credit

Appendix No. 5 — continued

COUNTRY MAIN ROADS FUND — GENERAL PURPOSES — continued

SUMMARY OF EXPENDITURE FROM DEPARTMENT'S FUNDS ON CONSTRUCTION AND RECONSTRUCTION WORKS — continued

CONSTRUCTING AUTHORITY: D indicates Department; C indicates Council

City, Municipal or Shire Area	Road No	Location of Work	Class of Construction	Amount
STATE HIGHWAYS — continued				\$
Mitchell Highway — continued				
Talbragar	7	18.3m west of Dubbo	Improvement of curve D	200
Warren	7	Level crossing at Nevertire	Extension D	260
do	7	28m to 37m south of Nyngan	Construction D	4,883
Wellington	7	13.4m to 18.68m west of Wellington	Reconstruction and widening D	101,300
				556,045
Barrier Highway				
Bogan	8	38.9m to 41.2m west of Nyngan	Deviation C	109,448
do	8	Muriel Tank, 39.7m to 40.4m west of Nyngan	Overbridge C	109,448 *
do	8	Muriel Tank, 39.7m to 40.4m west of Nyngan	do D	668
Central Darling	8	0m to 2m west of Wilcannia	Reconstruction and bitumen surfacing D	3,373
do	8	19m to 27m west of Wilcannia	do D	79,877
do	8	21m to 34m east of Wilcannia	do D	325,306 †
do	8	52m to 72.3m east of Wilcannia	do D	38
do	8	8m to 13m east of Wilcannia	do D	17,870 *
do	8	9m to 19m west of Wilcannia	do D	23,482 *
do	8	2m to 9m west of Wilcannia	do D	10,487
Cobar	8	80m to 92.8m west of Cobar	do D	3,476
do	8	70m to 80m west of Cobar	do D	18,026
do	8	30m to 40m west of Cobar	do D	162
do	8	1m to 5m east of Cobar	Widening D	64,093
do	8	92.5m to 102.5m west of Cobar	Reconstruction and bitumen surfacing D	101,109
Murray Darling Div	8	49.9m to 65.5m east of Broken Hill	do D	9,062
do	8	65.5m to 73m east of Broken Hill	do D	2,022
				\$ 576,347
New England Highway				
Armidale City	9	Stephens Bridge to Newton Street	Reconstruction C	1,186 *
do	9	1.1m to 1.3m south of Armidale and Junction with M.R. No. 124	do C	31,186
Guyra	9	Railway Siding to Guyra Abattoir	Overbridge D	5,366
do	9	1m to 6.5m north of Guyra to Llangothlin	Deviation on eastern side of railway D	128,713
do	9	1m to 2.46m south of Guyra	Deviation D	4,336
do	9	1m south to 0.34m north of Guyra	do D	106,885
Maitland	9	13.93m to 15.5m west of Newcastle	Dual carriageway and approaches to Four Mile Creek bridge D	3,107
do	9	0.85m to 2.76m west of Maitland	Reconstruction D	4,101
do	9	3.29m to 5.19m west of Maitland	do D	13,566
do	9	0.47m to 2.38m west of Maitland	Reconstruction and bitumen surfacing D	87,083
do	9	2.87m to 3.32m west of Maitland	Reconstruction D	325
do	9	Rutherford	Replacement of Overbridge D	76,099
Murrurundi	9	6.7m to 11.9m north of Murrurundi	Deviation D	464 *
do	9	Intersection with Chilcotts Creek Road	Improvement to level crossing and approaches C	1,235
Muswellbrook Munic.	9	Muscle Creek underpass	Improvement D	16,468
Newcastle and Maitland	9	11.18m to 13.93m west of Newcastle	Deviation D	244
Patrick Plains	9	19.7m to 21.1m west of Maitland	Reconstruction D	6,000 *
do	9	1.2m to 2.3m west of Singleton	Climbing lane D	8,620
Peel	9	41.2m to 43.2m north of Murrurundi	Reconstruction D	150,172
Scone	9	15.3m to 15.6m north of Muswellbrook	do D	117
do	9	14.4m to 15.4m north of Muswellbrook	Reconstruction, bitumen surfacing and culvert widening D	55,607
Severn	9	Ben Lomond 15.5m to 17.3m south of Glen Innes	Provision of climbing lane D	61,478
Tamarang	9	23m to 24.1m north of Murrurundi	Reconstruction and widening D	635 *
do	9	24.1m to 25.75m north of Murrurundi	Reconstruction and bitumen surfacing D	22,906
do	9	29m to 30.3m north of Murrurundi	do D	38,200
do	9	Bridges over Spring and Kangaroo Creeks	Approaches D	436
Tamworth	9	Scotts Road to Kent Street, Tamworth	Reconstruction C	45,000
do	9	Kable Ave, Tamworth	Adjustments for traffic signals C	2,185
do	9	3.2m south of Tamworth	Precast concrete box culvert C	17,878
Tenterfield Munic.	9	Rouse Street, Tenterfield	Reconstruction and bitumen surfacing C	3,000
Uralla	9	48.1m to 50.13m north of Tamworth	do D	5,391
				\$ 881,419
Pacific Highway				
Byron	10	Tyagarah Level Crossing	Approaches D	5,968
Coffs Harbour	10	0.5m north of Coffs Harbour	Widening of underpass D	9,711
do	10	4.8m to 8m north of Coffs Harbour	Reconstruction D	92,000
do	10	8m to 9.49m north of Coffs Harbour	do D	2,810 *
do	10	9.2m to 12.2m north of Coffs Harbour	Reconstruction, widening and bitumen surfacing D	300

* Credit

† For Additional Expenditure See Appendix No. 5A

Appendix No. 5 — continued

COUNTRY MAIN ROADS FUND — GENERAL PURPOSES — continued

SUMMARY OF EXPENDITURE FROM DEPARTMENT'S FUNDS ON CONSTRUCTION AND RECONSTRUCTION WORKS — continued

CONSTRUCTING AUTHORITY: D indicates Department C indicates Council

City, Municipal or Shire Area	Road No	Location of Work	Class of Construction	Amount
STATE HIGHWAYS — continued				\$
Pacific Highway — continued				
Coffs Harbour	10	Moonee Creek No.2, 9.3m north of Coffs Harbour	Prestressed concrete bridge D	861
Gosford	10	Intersection with M.R. No. 349	Channelisation D	1,502
Hastings	10	Southern approach to Wilson River, 264.74m from Sydney	Reinforced concrete box culvert D	7,696
do	10	Southern approach to Wilson River 264.93m from Sydney	do D	7,290
Lake Macquarie	10	South Street to Oakdale Road, South Gateshead	Dual carriageway D	323
do	10	5.92m to 6.93m south of Newcastle	Reconstruction and bitumen surfacing . . D	15,945
do	10	Eastern side, Oakdale Road to the Crescent, Gateshead	Reconstruction D	505
do	10	Cold Tea Creek, 13.5m south of Newcastle	Temporary connection to bridge D	111
do	10	Cold Tea Creek at Belmont	Prestressed concrete bridge D	552
Maclean	10	33m to 37m north of South Grafton	Reconstruction and bitumen surfacing . . D	3,657 *
Macleay	10	9m to 12.9m north of Kempsey	Reconstruction D	325
do	10	9m to 12.9m north of Kempsey	Reconstruction and bitumen surfacing . . D	12,156
Nambucca	10	0m to 2.2m north of Macksville	do D	2,201
do	10	Bridge over Upper Warrell Creek 6.8m south of Macksville	Extension D	96
Newcastle	10	Union Street to Stewart Avenue	Reconstruction and widening C	14,341 *
do	10	Gordon Avenue from Glebe Road to Stewart Avenue	Reconstruction and bitumen surfacing . . C	9,598
do	10	Newcastle City Boundary to M.R. No. 108	Dual carriageway C	768
do	10	Kooragang Island railway overbridge to Wallsend Road	Reconstruction C	30,000
do	10	Selected lengths from Tudor Street to Baker Street	do C	3,245
do	10	Cottage Creek	Reinforced concrete bridge C	18,394
Port Stephens	10	Grahamstown Lake, 18.5m to 21m north of Newcastle	Deviation D	2,701
do	10	16.75m to 18.5m north of Newcastle	Reconstruction and widening D	2,701 *
do	10	5.4m to 7.7m north of Raymond Terrace	Reconstruction and bitumen surfacing . . D	676
do	10	7.78m to 11.16m north of Raymond Terrace	do D	340
Stroud	10	1m north of Bulahdelah	Improvement to crest D	10,319
do	10	15.5m to 19m north of Bulahdelah	Reconstruction D	9,601
do	10	2.38m to 4.36m north of M.R. No.506	Widening of formation D	2,130 *
do	10	0.12m to 0.25m north of Myall River	Improvement to curve D	2,605
do	10	Selected sections, 7.05m to 8.78m north of Bulahdelah	Reconstruction and bitumen surfacing . . D	26,634
do	10	4.36m to 6.20m north of M.R. No.506	Widening of formation D	2,617
do	10	Bulga Creek to M.R. No. 506	Widening of formation and extension . . . D	34,452
do	10	0m to 2.38m and 6.2m to 10.12m north of M.R. No. 506	Widening of formation D	54,694
do	10	2.83m to 4.13m north of Bulahdelah	Climbing lane D	151,232
do	10	11.65m to 12.1m and 13.65m to 13.8m north of Bulahdelah	Strengthening and widening D	29,902
Taree	10	Intersection with Cowper Street, Taree	Improvement C	385
Tintenbar	10	Selected lengths 12.78m to 19.34m north of Woodburn	Restoration of damaged bitumen pavement D	362 *
do	10	6m to 7.57m north of Ballina	Reconstruction D	47,398
Tweed	10	River Terrace to Pacific Lane North Murwillumbah	do C	6,132
do	10	Intersection with Boundary Street Tweed Heads	Channelisation D	1,354
do	10	1.3m to 2.6m north of Murwillumbah	Reconstruction D	6,842
do	10	14.52m to 15.93m north of Murwillumbah	do D	7 *
do	10	0m to 1.3m north of Murwillumbah	Reconstruction and bitumen surfacing . . D	87,744
do	10	3.71m to 5.6m north of Murwillumbah	Reconstruction D	6,584
do	10	9m to 11m north of Murwillumbah	Deviation D	38
do	10	6m to 8m north of Murwillumbah	do D	19
do	10	17.4m to 18.6m north of Murwillumbah	Reconstruction and widening D	11,519
do	10	2.1m north of Murwillumbah	Deviation D	444
do	10	Tumbulgum, 5.5m to 7m north of Murwillumbah	do D	8,280
do	10	4.38m to 5.97m south of Murwillumbah	Climbing lanes D	21,114
do	10	5.97m to 6.98m south of Murwillumbah	do D	36,974
do	10	11.7m to 13.6m north of Murwillumbah	Reconstruction widening and bitumen surfacing D	974
Ulmarra	10	Bank of Clarence River north of Ulmarra	Erosion control D	100
do	10	Bridge over Blackadder Creek	Approaches D	6
Ulmarra and Maclean	10	Bridge over Coldstream River	do D	175
Woodburn	10	10.5m to 13.5m south of Woodburn	Reconstruction and bitumen surfacing . . D	65,130

* Credit

Appendix No. 5 — continued

COUNTRY MAIN ROADS FUND — GENERAL PURPOSES — continued

SUMMARY OF EXPENDITURE FROM DEPARTMENT'S FUNDS ON CONSTRUCTION AND RECONSTRUCTION WORKS — continued

CONSTRUCTING AUTHORITY: D indicates Department; C indicates Council

City, Municipal or Shire Area	Road No	Location of Work	Class of Construction	Amount
STATE HIGHWAYS — continued				\$
Pacific Highway — continued				
Woodburn	10	Bridges at 13.6m and 13.8m south of Woodburn	Approaches D	1,954
do	10	13.6m and 13.8m south of Woodburn	Reinforced concrete bridges D	34
do	10	Eversons Creek	Reinforced concrete pipe culvert D	312
Wyong	10	7.6m to 8.3m north of Gosford	Reconstruction and widening D	85,255
do	10	Bridge over Cut Rock Creek	Approaches D	45,580
do	10	Railway overbridge to North Road Wyong	Dual carriageway D	5,928
do	10	Vales Point turnoff	Side track D	25,108
do	10	Bridge over Cut Rock Creek	Widening D	973 *
do	10	11.5m to 12.5m north of Gosford	Widening of culverts D	172
				\$ 983,894
Oxley Highway				
Coonabarabran	11	2.4m to 3.4m south of Coonabarabran	Reconstruction D	339
do	11	0.7m north of Coonabarabran	Railway level crossing D	10,797
Gilgandra and Coonabarabran	11	13.15m to 53m east of Gilgandra	Reconstruction and bitumen surfacing . . D	12
Hastings	11	31m to 35m west of Port Macquarie	do D	229
do	11	34.61m to 38.17m west of Port Macquarie	do D	577
do	11	43.38m to 46.82m west of Port Macquarie	do D	122,001
do	11	29.2m to 31.18m west of Port Macquarie	do D	341 *
do	11	Kings Creek bridges 10.7m west of Port Macquarie	Approaches D	1,069
Peel	11	17m to 22m west of Tamworth	Reconstruction and bitumen surfacing . . C	20,000
Walcha	11	10m to 12.53m east of Walcha	do D	27,568
do	11	24m to 30m east of Walcha	do D	154,836
do	11	5m to 7m east of Walcha	do D	3,791
do	11	6m to 8m west of Walcha	do D	23,555
do	11	7m to 10m east of Walcha	do D	12,962
do	11	2.76m to 5m east of Walcha	do D	5
do	11	12.53m to 15m east of Walcha	do D	61,918
do	11	68m to 76m west of Port Macquarie	do D	502 *
do	11	2.5m west of Walcha	Elimination of crest D	146
Warren	11	0m to 4m east of Nevertire	Reconstruction and widening D	125
				\$ 439,087
Gwydir Highway				
Boolooroo	12	6m to 10m east of Moree	Reconstruction and bitumen surfacing . . C	245 *
Boomi	12	29.8m to 32.1m west of Moree	do D	10,538
do	12	Browns Creek 33.1m and 34m west of Moree	Reinforced concrete box culverts and approaches C	60,000
do	12	Cowbail Creek 28.6m west of Moree	Prestressed concrete bridge and approaches C	24,000
Grafton City	12	Intersection with T.R. No. 74 and T.R. No. 83	Channelisation D	14,569
Macintyre	12	5.1m to 6.6m west of Inverell	Reconstruction and bitumen surfacing . . C	20,000
Severn	12	Selected Sections 21.6m to 51.07m east of Glen Innes	Batter protection and erection of guide and fender posts D	3,282
do	12	Selected sections 47m to 56m east of Glen Innes	Mountain type drains D	6,975
do	12	At Gibraltar Range, 45m to 46m east of Glen Innes	Drainage D	1,148
do	12	Various locations east of Glen Innes	Batter protection D	230
				\$ 140,497
Sturt Highway				
Balranald	14	12.47m to 13.85m east of Euston	Reconstruction D	19,300
do	14	41.1m to 45.6m east of Euston	Widening D	48,668
do	14	3.7m to 12.6m and 13.8m to 14.5m east of Euston	do D	3,819
do	14	0m to 5.5m west of Euston	Reconstruction D	3,642
do	14	Murrumbidgee River at Balranald	Extension of bridge D	128
Hay	14	31m to 38m west of Hay	Realignment C	7,813 *
do	14	12.0m to 19m and 21.0m to 27.0m west of Hay	Widening of existing formation D	105,349
do	14	12m to 19.18m west of Hay	Reconstruction and bitumen surfacing . . D	43,385
do	14	19.5m to 22m west of Hay	Reconstruction of curves D	70,006
Kyeamba	14	17.26m to 18.48m west of S.H. No.2	Reconstruction and bitumen surfacing . . D	21,898
Mitchell	14	Approaches to Bullenbung Creek Bridge	do D	65,476
do	14	Various sections 5.2m to 44.6m west of Wagga Wagga	Improvement to grading D	269
Narrandera	14	38.98m to 43.63m west of Wagga Wagga	Reconstruction and bitumen surfacing . . D	600
do	14	Bridge over Poisoned Waterholes Creek 54.75m west of Wagga Wagga	Approaches D	10

Appendix No. 5 — continued

COUNTRY MAIN ROADS FUND — GENERAL PURPOSES — continued

SUMMARY OF EXPENDITURE FROM DEPARTMENT'S FUNDS ON CONSTRUCTION AND RECONSTRUCTION WORKS — continued

CONSTRUCTING AUTHORITY: D indicates Department; C indicates Council

City, Municipal or Shire Area	Road No	Location of Work	Class of Construction	Amount
STATE HIGHWAYS — continued				\$
Sturt Highway — continued				
Wakool	14	68.05m to 74.05m west of Hay	Bitumen surfacing C	6,836
do	14	51.09m to 71.09m west of Hay	Reconstruction and bitumen surfacing . . D	7,866
				\$ 389,439
Barton Highway				
Goodradigbee	15	25.0m to 27.7m from Canberra	Reconstruction and bitumen surfacing . . D	50,274
				\$ 50,274
Bruxner Highway				
Ashford	16	4m to 10m east of Bonshaw	Reconstruction and bitumen surfacing . . D	54,243
do	16	10m to 14m east of Bonshaw	do . . . D	31,720
do	16	0.5m to 5m west of Bonshaw	do . . . D	11,487
do	16	0.5m to 4m east of Bonshaw	do . . . D	5,895
do	16	New Bridge over Brown's Creek 27.7m west of Bonshaw	Approaches C	16,938
do	16	Bridge over Middle Creek, 31.6m west of Bonshaw	do C	20,000
do	16	Campbells Creek 33.4m west of Bonshaw	Reinforced concrete box culvert C	589 *
do	16	35m to 41m west of Bonshaw at Yetman	Reconstruction and bitumen surfacing . . C	25,432
do	16	31m to 35m west of Bonshaw	do . . . C	42,174
do	16	23.6m to 27.5m west of Bonshaw	do . . . C	7,174 *
do	16	4.8m to 8m west of Texas	do . . . C	3,380 *
do	16	Myall Creek, 1.8m west of Bonshaw	Reinforced concrete bridges D	262
do	16	Brown's Creek, 26m west of Bonshaw	Reinforced concrete box culverts C	23,600
do	16	Middle Creek, 31.6m west of Bonshaw	Prestressed concrete bridge C	37,578
Gundurimba	16	24.97m to 25.5m west of Ballina	Reconstruction and bitumen surfacing . . C	1,896
do	16	22.7m to 23.8m west of Ballina	do . . . C	9,262
do	16	Bridge over Loftville Creek, 24m from Ballina	Approaches C	33,051
do	16	24.11m to 24.97m west of Ballina	Deviation C	12,067
Kyogle	16	16.63m to 16.9m west of Casino	Reconstruction D	10,814
do	16	Deep Creek 16.7m west of Casino	Erosion protection D	502
Tenterfield Shire	16	14m to 19.8m east of Bonshaw	Reconstruction and bitumen surfacing . . D	53,943
do	16	26m to 29m east of Tenterfield	do . . . C	85,000
do	16	13m to 18m east of Tenterfield	do . . . C	1,974
do	16	29m to 32m west of Tenterfield (Mole Descent)	do . . . C	27,500
do	16	80m to 85m west of Ballina	do . . . D	3,342
do	16	77.23m to 80m west of Ballina	do . . . D	21,747
do	16	85m to 87m west of Ballina	do . . . D	37,953
do	16	87m to 91.3m west of Ballina	do . . . D	5
do	16	Little Yellow Creek, 8.1m east of Drake	Reinforced concrete bridge D	49
Tomki	16	Selected lengths 8m to 12m west of Casino	Strengthening and resealing D	440
do	16	Selected lengths 7m to 12m west of Casino	do D	60,100
Yallaroi	16	Scrubby Creek, 14.53m west of Yetman	Reinforced concrete box culvert and approaches C	10,000
do	16	12.21m west of Yetman at Spring Creek	Reinforced concrete bridge C	7,000
do	16	From 13.93m west of Yetman	Reconstruction and bitumen surfacing . . C	9,500
				\$ 644,331
Newell Highway				
Bland	17	Approaches to Scott and Mandamah Creek Bridges	Bitumen sealing D	1,295
do	17	15.15m to 20m north of Ardlethan	Bitumen surfacing D	44
do	17	15.15m to 28m north of Ardlethan	Bitumen sealing D	51,268
do	17	Mandamah Creek 17.4m north of Ardlethan	Reinforced concrete bridge D	161
do	17	Scotts Creek 16.9m north of Ardlethan	do D	46
Boolooroo	17	9.5m to 18.5m north of Moree	Reconstruction and bitumen sealing . . . D	738
do	17	7m to 9.5m north of Moree	do . . . D	376
do	17	19m to 29.6m north of Moree	do . . . D	470
do	17	29.6m to 39.6m north of Moree	do . . . D	1,081
do	17	39m to 47m north of Moree	do . . . D	114,957
do	17	5.19m to 9m south of Moree	do . . . D	121
do	17	54m to 61m north of Moree	do . . . D	5,809
do	17	Mungle Back Creek, 51.9m north of Moree	Reinforced concrete bridge D	22
Coolamon	17	South from Ardlethan	Gravelling and sealing C	31
Coonabarabran	17	56.23m south of Narrabri	Culvert extension D	4
do	17	Intersection with S.H. No. 11	Reconstruction D	4,379
do	17	47m to 57m south of Narrabri	Reconstruction and bitumen surfacing . . D	1,829
do	17	54.22m to 58.26m south of Narrabri	do . . . D	11,812
do	17	Bridge over Billy Creek, 50.13m to 51.56m south of Narrabri	Approaches D	3,404

Appendix No. 5 — continued

COUNTRY MAIN ROADS FUND — GENERAL PURPOSES — continued

SUMMARY OF EXPENDITURE FROM DEPARTMENT'S FUNDS ON CONSTRUCTION AND RECONSTRUCTION WORKS — continued

CONSTRUCTING AUTHORITY: D indicates Department; C indicates Council

City, Municipal or Shire Area	Road No	Location of Work	Class of Construction	Amount
STATE HIGHWAYS — continued				\$
Newell Highway — continued				
Coonabarabran	17	58.5m to 63.5m south of Narrabri	Reconstruction and bitumen surfacing . . D	34,341
do	17	Billy Creek and Cusack Creek, 51m and 56m south of Narrabri	Reinforced concrete culverts D	15 *
Forbes	17	Approach to Bridge over Lake Forbes	Deviation including bitumen surfacing . . C	37,078
do	17	Lake Forbes at Forbes	Reinforced concrete bridge D	4
Gilgandra	17	32m to 39m north of Dubbo	Reconstruction D	10,486
Goobang	17	Parkes to Alectown	Widening including culverts D	53,438
do	17	9.5m to 20.0m north of Parkes	Widening D	11,384
do	17	14.8m north of Parkes	Elimination of Causeway D	7,033
Jemalong	17	Bundaburrah Creek, 7m from Forbes	Widening C	2,972
do	17	1.7m to 3.6m north of Forbes	Reconstruction and bitumen surfacing . . C	1,462 *
Jerilderie	17	10.1m to 11.8m north of Jerilderie	Widening and bitumen sealing D	24,888
Namoi and Coonabarabran	17	37.7m to 47m south of Narrabri	Reconstruction and bitumen surfacing . . D	8,889
Namoi	17	Box Flat Creek, 29.4m south of Narrabri	Reinforced concrete box culvert D	49 *
Namoi	17	Tooley Gully, 32.3m south of Narrabri	do D	242 *
Narrabri	17	Bridge over Doctors Creek at north Narrabri	Approaches C	1,102 *
				\$ 385,490
Castlereagh Highway				
Coonamble	18	2m to 9m north of Coonamble	Reconstruction of damaged bitumen pavement D	103
Gilgandra	18	0.2m to 2.1m north of Gilgandra	Widening and bitumen surfacing D	43,028
Walgett	18	44m to 56m north of Walgett	Reconstruction and bitumen surfacing . . D	137
do	18	32m to 44m north of Walgett	do D	410,511
do	18	8m to 20m north of Walgett	do D	84,143
do	18	20m to 32m north of Walgett	do D	42,813
				\$ 580,735
Monaro Highway				
Bibbenluke	19	9.4m to 11.26m south of Nimmitabel	Reconstruction and bitumen surfacing . . C	5,210
do	19	11.26m to 13.8m south of Nimmitabel	do C	44,598
do	19	8m to 10m south of Bombala	do C	31,000
Cooma	19	0.9m to 1.6m south of Cooma	do C	1,933
do	19	Railway overbridge 0.9m south of Cooma	Sidetrack C	5,004
Monaro	19	36.36m, 38.82m and 41.12m south of Canberra	Improvement to level crossings D	4,570
do	19	0m to 3.6m south of Nimmitabel	Reconstruction and bitumen surfacing . . D	5,103 *
do	19	3.6m to 7.8m south of Nimmitabel	do D	4,667
do	19	7.8m to 10m south of Nimmitabel	do D	6,122
do	19	57.5m to 58m south of Canberra	do D	4,640
do	19	31m to 35m south of Canberra	do D	5,401
do	19	Gungoandra Creek 46.2m south of Canberra	Reinforced concrete bridge D	1,605 *
Yarrowlumla	19	30.19m to 31.19m south of Canberra	Reconstruction and bitumen surfacing . . D	50,794
				\$ 157,231
Riverina Highway				
Berrigan	20	4.91m to 6.32m west of Berrigan	Reconstruction and bitumen surfacing . . D	73,685
do	20	1.4m to 8.8m west of Berrigan	Reconstruction and widening D	140,087
do	20	Bridge over Mulwala Canal at 3.8m east of Finley	Approaches D	1,000
Conargo	20	5.6m to 13m east of Deniliquin	Reconstruction and widening D	20
Deniliquin	20	2.86m to 5.77m east of Deniliquin	Reconstruction and bitumen surfacing . . C	25,000
do	20	2.87m to 5.78m east of Deniliquin	do C	19,600
				\$ 259,392
Cobb Highway				
Deniliquin	21	Bridge over Edward River at Deniliquin	Approaches D	945
do	21	Flood channel of Edward River at Deniliquin	Prestressed concrete bridge D	184
Hay	21	24m to 46m north of Hay	Reconstruction and bitumen surfacing . . D	15,773
do	21	Cabbage Creek, 41m north of Hay	Reinforced concrete box culvert D	919
Murray	21	4.7m to 8.2m north of Moama	Reconstruction, widening and bitumen surfacing D	17,037
do	21	16.65m to 24m north of Moama	Reconstruction and bitumen surfacing . . D	88 *
Windouran	21	Bridge over Billabong Creek at Wanganella	Approaches C	34,114
do	21	Billabong Creek, 25.77m north of Deniliquin	Steel and concrete bridge and approaches C	1,471 *
do	21	30m to 34.85m south of Hay	Reconstruction and bitumen surfacing . . D	87,968
				\$ 155,381

Appendix No. 5 — continued

COUNTRY MAIN ROADS FUND — GENERAL PURPOSES — continued

SUMMARY OF EXPENDITURE FROM DEPARTMENT'S FUNDS ON CONSTRUCTION AND RECONSTRUCTION WORKS — continued

CONSTRUCTING AUTHORITY: D indicates Department C indicates Council

City, Municipal or Shire Area	Road No	Location of Work	Class of Construction	Amount
STATE HIGHWAYS — continued				\$
Silver City Highway				
Wentworth	22	2 mile break 2m north of Wentworth	Prestressed concrete bridge D	182
do	22	Darling River at Wentworth	Steel and concrete bridge D	219
do	22	Approaches to Abbotsford Bridge at Curliavaa	Reconstruction D	10,814
do	22	1m to 11m north of Wentworth	Reconstruction and bitumen surfacing . . D	62,799
do	22	31.8m to 41.8m north of Wentworth	Reconstruction D	7,826
				\$ 81,840
State Highway No. 23				
Newcastle	23	Newcastle Road to Sandgate Road	Reconstruction D	95
				\$95
Mount Lindsay Highway				
Kyogle	24	Junction with T.R. No. 83 and Queensland border.	Reconstruction C	5,000
				\$5,000
Illawarra Highway				
Shellharbour	25	7.5m to 12.5m west of S.H. No.1	Improvement and provision of climbing lane D	140,897
Wingecarribee	25	Intersection with M.R. No. 265 5m to 6.5m east of Moss Vale	Reconstruction, bitumen surfacing and improvement D	132,216
do	25	2m to 4m east of Moss Vale	Reconstruction and widening D	14,950
				\$ 288,063
State Highway No. 26				
Gosford	26	2.32m to 2.77m north of Calga	South bound lane D	3,169
do	26	Calga interchange to 2.5m north of Calga	Additional lane D	39,990
do	26	Calgo to Ourimbah	Street lighting at intersections D	1,750
				\$ 44,909
Total — State Highways				\$8,773,313
TRUNK AND ORDINARY MAIN ROADS				
Abercrombie	54	17.61m to 19.19m from Bathurst	Reconstruction and bitumen surfacing . . C	253 *
do	54	21.4m to 22m and 23m to 26.5m south of Bathurst	do . . . C	18,000
do	54	19.4m to 21.4m south of Bathurst	do . . . C	312
do	55	Level Crossing 2m south of Mudgee	Installation of "F" type signals D	10,429
do	252	17.27m to 19.04m from Bathurst	Reconstruction and bitumen surfacing . . C	253
do	252	Thompsons Creek 14m from Bathurst	Reinforced concrete bridge C	19,000
do	252	24.6m to 25m south of Bathurst	Reconstruction C	5,500
Ashford	63	20.25m to 25.5m and 31.3m to 37.52m north of Warialda	Reconstruction and bitumen surfacing . . C	15,875
do	137	Cox Gully, 32.45m north of Inverell	Precast concrete box culvert C	4,500
do	137	32.5m to 34.6m north of Inverell	Reconstruction and widening C	4,208 *
do	137	2.7m to 5.3m north of Bonshaw	Reconstruction and bitumen surfacing . . C	7,194 *
do	137	4.6m to 7m north of Ashford	do . . . C	19,709
do	138	0m to 1.9m north of S.H. No. 16	Construction and bitumen surfacing . . D	3,855
do	187	Gramen Creek at Gramen	Prestressed concrete bridge C	13,000
do	187	35.4m to 38.9m north of Inverell	Reconstruction of failed pavement . . . C	1,200
Ballina	545	0.15m to 0.45m east of State Highway No. 10	Reconstruction C	4,770
Balranald	67	14m to 17.2m north of Balranald	Reconstruction and bitumen surfacing . . C	4,880
do	67	62.3m to 64.9m north of Balranald	Reconstruction C	14,200
do	67	60.0m to 62.3m north of Balranald	Reconstruction and bitumen surfacing . . C	4,407
do	67	17.2m to 22m north of Balranald	do . . . C	9,000
Barraba	63	18.26m to 20.02m north of Barraba	do . . . C	1,273
do	132	Saveall Creek 21m north of Barraba	Reinforced concrete bridge and deviation C	8,209 *
do	132	1.81m to 4.00m north east of Barraba	Reconstruction and bitumen surfacing . . C	20,000
do	360	4.92m west of T.R. No. 63	Reinforced concrete causeway and minor realignment C	16,163
Bellingen	76	Dorrigo Mountain Pass	Improvement C	8,240
do	120	Dorrigo to Caramba	Realignment C	10,090
Berrigan	550	16m to 19.3m west of Corowa	Reconstruction and bitumen surfacing . . C	15,700
do	550	17m to 21.5m west of Shire Boundary	do . . . C	2,767
do	550	0m to 6.3m west of Shire Boundary	do . . . C	10,333
do	550	13.8m to 16m west of Corowa Shire Boundary	do . . . C	9,000
Bibbenluke	91	5m to 6.55m east of Bombala	do . . . C	5,172
do	91	4m to 6m east of Bombala	do . . . C	2,683
do	91	6.55m to 8.41m east of Bombala	do . . . C	15,518
do	91	6.55m to 8.4m east of Bombala	Gravelling, priming and sealing C	15,000
do	91	Yellow Waterhole Creek 12.8m from Bombala	Reinforced concrete bridge and approaches C	15,000
do	394	15m north west of S.H. No. 19	Realignment C	170 *

* Credit

Appendix No. 5 — continued

COUNTRY MAIN ROADS FUND — GENERAL PURPOSES — continued

SUMMARY OF EXPENDITURE FROM DEPARTMENT'S FUNDS ON CONSTRUCTION AND RECONSTRUCTION WORKS — continued

CONSTRUCTING AUTHORITY: D indicates Department; C indicates Council

City, Municipal or Shire Area	Road No	Location of Work	Class of Construction	Amount
TRUNK AND ORDINARY MAIN ROADS — continued				\$
Bingara	133	19.8m to 20.8m west of Bingara	Realignment and reconstruction C	345
do	134	Whitlow Creek, 3.6m from Bingara	Prestressed concrete bridge C	2,000
do	134	From 4.37m north of Bingara	Reconstruction and bitumen surfacing . . C	253
do	134	2.15m to 5.25m north of Bingara	do C	253 *
Bland	231	9.26m to 15.04m north of Girral	Reconstruction and bitumen surfacing and drainage structures C	495 *
do	231	18.25m to 19.47m north of Girral at Shire Boundary	Reconstruction and bitumen surfacing . . C	8,500
do	325	0.26m to 1.34m west of Barmedman	do C	2,995
do	398	0.17m to 4.97m east of Barmedman	Reconstruction and bitumen surfacing . . C	9,000
do	398	Barmedman Creek 3m east of Barmedman	Reinforced concrete bridge C	939 *
Blaxland	55	16m to 19.5m west of Lithgow	Reconstruction and bitumen surfacing . . D	295,386
do	531	Railway overbridge at Wallerawang	Provision of footway and reconstruction . C	7,300
do	531	5.2m to 6.4m north of S.H. No. 5	Reconstruction and bitumen surfacing . . C	9,000
Bogan	57	Mulla Cowal 10m south of Nyngan	Steel and concrete bridge and approaches . C	1,599
do	204	Duck Creek 21.8m north of Nyngan	Construction of bridge C	47,000
do	228	0.11m to 1.27m from Hermidale	Reconstruction and bitumen surfacing . . C	807 *
Booolooroo	232	1.68m to 3.00m north of Moree	Widening and surfacing C	11,031
do	232	5.33m to 6.53m north of Moree	Reconstruction and bitumen surfacing . . C	369
do	507	25.55m west of Goondiwindi	do C	12,708
do	507	28.3m to 30m west of Goondiwindi	do C	13,000
do	507	22m to 25m west of Goondiwindi	Strengthening and bitumen surfacing . . C	2,211 *
Boomi	232	40.04m to 42m north of Moree	Reconstruction and bitumen surfacing . . C	2,332
do	232	36.24m to 40.04m north of Moree	do C	2,332 *
do	367	Miltonville Creek, 50m north west of Moree	Reinforced concrete box culvert and approaches C	72 *
do	367	60.8m to 63.6m north of Moree	Reconstruction and bitumen surfacing . . C	19,000
do	367	65.7m to 67.7m north of Moree	do C	1,329
Boorowa	56	16m to 18.3m north of Boorowa	do C	2,313
do	56	20.5m to 22m north of Boorowa	do C	12,000
do	56	19m to 20m north of Boorowa	do C	10,750
do	56	18.3m to 19m north of Boorowa	do C	3
do	241	5.93m to 7.13m from Boorowa	do C	4,506
do	241	2.75m to 5m west of Boorowa	do C	159
do	241	Harrys Creek 6.7m east of Boorowa	Reinforced concrete bridge C	8,165
do	241	18.35m to 20.55m east of Boorowa	Reconstruction and gravelling C	2,773
Boree	61	Level crossing at Meranburn 2.15m west of Manildra	Installation of flashing lights C	533 *
do	237	54.5m to 56.1m from Canowindra	Reconstruction and bitumen surfacing . . C	1,629
do	237	20.1m to 22.05m from Orange	do C	1,215
do	310	17.7m to 19.1m from Canowindra	do C	1,101
do	310	Burrajin Gully, 7m south of Cudal	Reinforced concrete box culvert C	207 *
do	377	36.7m to 37.9m from Orange	Reconstruction and realignment C	19,473
Brewarrina	70	5m to 26m north of Brewarrina	Provision of grids and culverts C	2,270
Burrangong	241	19m to 21m west of Young	Reconstruction of pavement priming . . C	7,307
do	241	15.2m to 24.5m west of Young	Reconstruction and bitumen surfacing . . C	12,454
do	241	21m to 23m west of Young	do C	16,000
do	241	Burrangong Creek	Bridge and approaches C	59,000
Byron	65	Railway Underpass at Binna Barra	Realignment C	2,919
do	524	5.3m from S.H. No. 10	Reinforced concrete box culvert C	13,280
Camden	259	0.52m to 0.9m from S.H. No. 2	Two reinforced concrete box culverts . . C	607
do	259	1.24m from S.H. No. 2	Improvement and strengthening C	13
Canobolas	61	7.6m to 8.23m west of Orange	Reconstruction and bitumen surfacing . . C	6,729
do	61	Railway level crossing at Borenore	Improvements C	4,332 *
do	237	12.3m to 14m south of Orange	Reconstruction and bitumen surfacing . . C	188 *
do	237	6.28m to 9m south of Orange	do C	17,200 *
do	559	0m to 2.62m from S.H. No. 7 at Whiley's junction	do C	17,200
do	573	Calula Creek 17.8m north of Orange	Reinforced concrete bridges and approaches C	16,904
Central Darling	433	19.6m west of Darnick	Construction C	12,000
Coffs Harbour	151	37m to 38m south of Grafton	Reconstruction and bitumen surfacing . . C	6,625
do	161	32.12m to 33.12m south of Grafton	do C	2,752
do	153	Coramba northwards towards Nana Glen	do C	1,047
do	540	Boambee Creek 6.35m from S.H. No. 10	Concrete bridge C	53,435
Colo	503	41.35m to 48.25m north of Windsor	Bitumen surfacing D	81 *
do	503	9m to 9.68m north of Windsor	Reconstruction D	91,109
do	503	41.5m to 49.5m north of Windsor	Asphaltic concrete pavement D	355
do	503	9.68m to 10.02m north of Windsor	Reconstruction D	6,484
do	503	7.42m to 7.8m north of Howes Creek Bridge	Improvement and widening D	489
do	519	10.1m to 11.1m from M.R. No. 184	Reconstruction and bitumen surfacing . . C	7,500
Conargo	552	31m to 35m from Deniliquin	do C	989
do	552	36m to 42.1m from Deniliquin	Reconstruction, realignment and bitumen surfacing C	6,000

* Credit

Appendix No. 5 — continued

COUNTRY MAIN ROADS FUND — GENERAL PURPOSES — continued
SUMMARY OF EXPENDITURE FROM DEPARTMENT'S FUNDS ON CONSTRUCTION AND RECONSTRUCTION WORKS — continued

CONSTRUCTING AUTHORITY: D indicates Department; C indicates Council

City, Municipal or Shire Area	Road No	Location of Work	Class of Construction	Amount
TRUNK AND ORDINARY MAIN ROADS — continued				\$
Conargo	552	23.1m to 27.6m from Deniliquin	Reconstruction and bitumen surfacing . . C	35 *
do	552	27.6m to 32m from Deniliquin	do . . . C	3,535
do	552	39.0m to 42.1m from Deniliquin	do . . . C	13,300
do	552	Forest Creek at 37.64m from Deniliquin	Prestressed concrete bridge C	21,932
Condobolin	230	0.0m to 2.43m from T.R. No.57	Reconstruction and bitumen surfacing . . C	10,000
Coolah	55	4.2m to 5m north of Coolah	do . . . C	3,000
do	55	5m to 6.3m north of Coolah	do . . . C	8,000
do	55	3.6m to 4.2m north of Coolah	do . . . C	2,306
do	77	Ukebung Creek 17m west of Dunedoo	Reinforced concrete bridge and approaches C	41,000
do	206	Limestone Creek 2.5m west of Dunedoo	Prestressed concrete bridge and approaches C	1,214
do	206	2.3m to 4.5m south west of Dunedoo	Reconstruction and bitumen surfacing . . C	41 *
Coolamon	240	13.6m to 16m north of Coolamon	do . . . C	6,150
do	243	9m to 9.5m east of Coolamon	Reconstruction and realignment C	3,000
do	543	South of Coolamon to Mitchell Shire Boundary	Reconstruction and bitumen surfacing . . C	10,500
Coonabarabran	55	18.5m to 33.5m north of Coolah	do . . . C	4,809
do	129	Railway overbridge 4.5m north of Coonabarabran	Approaches C	15,000
do	129	4.7m to 6m north of Coonabarabran	Reconstruction and bitumen surfacing . . C	6,377
do	329	1.5m to 4m north of Baradine	do . . . C	379
do	329	6m to 6.85m north of Baradine	do . . . C	46
do	329	6.9m to 10.9m north of Baradine	do . . . C	20,000
do	334	1m south of S.H. No. 11	Reinforced concrete box culvert C	376
do	396	Salty Creek 10.5m south of Coonabarabran	Reinforced concrete bridge C	1,797
Coonamble	205	Baronne Creek at Dooroombah	do C	4,000
Cootamundra	78	1.3m to 1.7m north of Cootamundra	Reconstruction C	898
Copmanhurst	83	Six Mile Creek at Battens Bight 39m north of Grafton	Prestressed concrete bridge D	18
do	83	13.54m north of Grafton	Reinforced concrete bridge and approaches C	8,697
do	83	At 36.55m, 36.59m and 36.64m north of Grafton	Reinforced concrete box culverts C	35,225
do	150	22m to 23.42m north of Grafton	Reconstruction and bitumen surfacing . . C	14,091
do	150	65.1m to 65.6m north of Grafton	Re-alignment C	4,510
do	150	7.3m to 9.4m north of Grafton	Reconstruction and bitumen surfacing . . C	14,780
do	150	24.2m to 25m north of Grafton	Reconstruction C	11 *
do	151	Alumny Creek 8.05m from Grafton	Prestressed concrete bridge C	1,945
Corowa	331	East of M.R. No. 131 at Daysdale, section 1.	Reconstruction C	7,000
do	331	3m to 6m west of Daysdale, section 2	Reconstruction and bitumen surfacing . . C	410
do	331	1m to 15.15m west of M.R. No. 131	do . . . C	3,590
do	331	3m to 5.42m east of M.R. No. 131	do . . . C	5,000
Crookwell	247	Reedy Creek at Laggan	Reinforced concrete box culvert C	6,476
do	248	Lachlan River at Narrawa	Steel and concrete bridge C	47,416
do	249	1.9m to 4m south of Crookwell	Reconstruction and bitumen surfacing . . C	5,107
Cudgegong	55	Bridge over Cudgegong River 9m north of Mudjee	Approaches C	2 *
do	208	11.8m to 12.8m from Mudjee	Reconstruction and bitumen surfacing . . C	3,000
do	214	16.3m to 17.2m north of Mudjee	do . . . C	11,750
do	214	15.5m to 16.5m north of Mudjee	do . . . C	4,500
do	214	Sportsmans Hollow Creek at Ulan	Reinforced concrete bridge C	800
do	216	10.1m to 11.0m south of Mudjee	Reconstruction and bitumen surfacing . . C	4,000
do	233	Two Mile Flat Creek, 11.9m west of Gulgong	Reinforced concrete bridge C	564
do	233	20.2m to 22m west of Gulgong	Reconstruction and bitumen surfacing . . C	12,362
do	233	15.85m to 19.15m from Gulgong	do . . . C	3,424 *
Culcairn	78	Billabong Creek at Culcairn	Steel and concrete bridge and approaches C	3,663
do	331	25m to 36.1m from Culcairn	Reconstruction and bitumen surfacing . . C	4,729 *
do	547	Billabong Creek 1m south of M.R. No. 331	Reinforced concrete bridge C	100,500
do	547	Billabong Creek 5m north of Walla Walla	do C	1,000 *
Darling	68	0m to 3m east of Bourke	Reconstruction and bitumen surfacing . . C	40,045
do	68	0.2m to 3.45m from Louth	Gravel sheeting C	106 *
do	407			
do	425	35m east of S.H. No. 7	Reinforced concrete box culvert C	45 *
Demondrille	84	2.57m to 3.63m east of Murrumburrah	Reconstruction and bitumen surfacing . . C	5,442
do	84	1.8m to 2m west of Murrumburrah	do . . . C	10,590
do	380	7.6m to 10.6m east of T.R. No. 84	do . . . C	699 *
do	380	11.9m to 13.2m east of Murrumburrah	do . . . C	15,699
do	380	3.1m to 7.3m east of T.R. No. 84	do . . . C	4,200
Denman	209	Hunter River at Denman	Steel and concrete bridge D	1,271
do	209	Sandy Creek 15.5m south of Muswellbrook	Approaches C	1,177

* Credit

Appendix No. 5 — continued

COUNTRY MAIN ROADS FUND — GENERAL PURPOSES — continued

SUMMARY OF EXPENDITURE FROM DEPARTMENT'S FUNDS ON CONSTRUCTION AND RECONSTRUCTION WORKS — continued

CONSTRUCTING AUTHORITY: D indicates Department; C indicates Council

City, Municipal or Shire Area	Road No	Location of Work	Class of Construction	Amount
TRUNK AND ORDINARY MAIN ROADS — continued				\$
Denman	209	Bridge over Wybong Creek, 21.9m south of Muswellbrook	Improvement of approaches C	738 *
Dumaresq	74	34.31m to 38.91m east of Armidale	Reconstruction and bitumen surfacing . . C	1,908 *
do	74	Oakey Creek, 38.84m to 39.14m and 39.48m to 39.75m east of Armidale	Bridge approaches and adjacent works . . C	8,000
do	75	Little Georges Creek, 48m east of Armidale	Reinforced concrete bridge and approaches C	443 *
do	75	Tibbs Gully, 49m east of Armidale	do C	2,617 *
Dungog	101	Myall Creek at Dungog	do C	4,000
do	101	1.8m to 4.6m south of Dungog	Reconstruction and bitumen surfacing . . C	4,390
do	101	Dungog to Wirrayulla	do . . . C	6,000 *
do	128	Westerly from Gresford	do . . . C	237 *
do	301	9m to 9.83m south of Wirrayulla	do . . . C	653
Eurobodalla	271	23.7m west of Moruya	Replacement of timber culvert C	189 *
do	271	7m from Moruya	Improvement to alignment C	1,333
Gilgandra	77	13.4m to 15.4m from Grenfell	Reconstruction and bitumen surfacing . . C	5,000
do	77	1.36m to 5m east of Gilgandra	do . . . C	4,992 *
Goobang	233	7.1m from Parkes	Reinforced concrete box culvert C	6,559
do	233	East of Back Goobang Creek at 6.3m from Parkes	Reconstruction and bitumen surfacing . . C	13,833
do	348	40.4m to 41.7m from Peak Hill towards Tullamore	do . . . C	1,500 *
do	350	1.15m to 6m north of Trundle	do . . . C	1,127 *
Goodradigbee	56	14.6m to 15.2m north of Yass	do . . . C	12,000
do	56	17.20m to 18.9m north of Yass	do . . . C	1,300
do	249	4.8m to 5.8m south of Gundaroo	do . . . C	2,978
do	278	7.42m to 8.04m south of Yass	do . . . C	4,277
Gosford	225	6m west of S.H. No. 10	Reconstruction and realignment C	136 *
do	225	17.6m to 18.1m from S.H. No.10	Reconstruction and bitumen surfacing . . C	2,000
do	349	1.04m to 1.46m from S.H. No.10	do . . . C	4,300
Goulburn	54	0.98m to 1.57m north of Goulburn Newton Street intersection	do . . . C	3,634
do	79	Auburn Street to Sloane Street, Goulburn	Reconstruction and channellisation . . . C	60,418 * †
do	256	2.12m to 2.74m north of Goulburn	Reconstruction and bitumen surfacing . . C	3,475
Grafton	74	3.81m south of Grafton	Multi-cell pipe culvert C	4,826
Greater Cessnock	195	Lang Street to Railway Street, Kurri Kurri	Reconstruction and widening C	8,170
do	195	Government Road including junction with Smelter Road	Reconstruction C	5,600
do	220	3.3m south of Cessnock	Elimination of causeway C	6,222
do	220	14.85m to 15.95m south of Cessnock	Reconstruction and bitumen surfacing . . C	14,172
do	223	Bridges over Wallis and Surveyors Creeks	Channel protection C	3,272 *
Gundagai	279	3.42m to 3.80m south of Gundagai at Stoney Creek	Temporary sealing C	1,661
Gundurimba	147	18.3m to 19.38m from Woodburn	Reconstruction and bitumen surfacing including culvert C	1,495
do	544	2.32m to 4.03m from S.H. No. 16	Reconstruction and bitumen surfacing . . C	15,970
do	555	Tomki Creek, 14.67m from Wardell	Reinforced concrete bridge C	1,440
Gunning	249	6m to 8m south of Gunning	Reconstruction and bitumen surfacing . . C	20,000
do	251	Jerrowa Creek, 2m from Dalton	Reinforced concrete bridge and approaches C	30,000
do	251	Blakney Creek, 11.6m from Dalton	do . . . C	1,088
Guyra	73	16.15m south of Inverell	Reinforced concrete pipe culvert C	6,250
do	135	7.4m to 9m west of Guyra	Reconstruction and bitumen surfacing . . C	5,977
do	135	11m to 12.35m west of Guyra	do . . . C	7,000
do	135	4.82m to 5.76m west of Guyra	do . . . C	1,164
Hastings	112	Gannon's Creek 0.8m from S.H. No.11	Concrete bridge C	2,411 *
Hay	319	25.25m to 26m north of Windouran Shire Boundary	Reconstruction and bitumen surfacing . . C	417
do	514	29.8m to 33.25m west of S.H. No. 21	do . . . C	17,767
do	514	2m to 9m west of Hay	Regrading C	368 *
do	514	33.95m to 37.55m west of Hay	Reconstruction and bitumen surfacing . . C	16,500
do	514	28.25m to 32m from Hay	do . . . C	695
Holbrook	282	4m west of Jingellic	Raising road formation C	5,288 *
do	331	17.7m to 30.3m east of Holbrook	Reconstruction and bitumen surfacing . . C	5,288
do	331	From T.R. No. 85 towards Holbrook section No. 2	Reconstruction C	10,000
Hume	125	6m to 10m north of Albury	Widening C	908
do	547	10.6m to 22.3m from Albury	Reconstruction and bitumen surfacing . . C	1,557
Illabo	78	13.7m to 19.85m north of Wagga Wagga	Reconstruction C	25,500
Imlay	91	13m to 15.10m west of Pambula	Reconstruction and bitumen surfacing . . C	10,000
do	91	10m to 11m west of Pambula	Reconstruction C	4,000
do	275	Tylers Creek, 3.5m from S.H. No.1	Bridge construction C	35,000
Inverell	73	0m to 1.2m south of S.H. No. 12	Strengthening and widening C	13,000
do	137	1m to 2.9m north of Inverell	Widening and strengthening pavement. . C	1,201 *
Jemalong	61	Ootha, 18.5m east of Condobolin	Railway overbridge D	16,779
do	61	Ootha, 18.5m east of Condobolin	do C	33,598

* Credit

† For Additional Expenditure see Appendix No. 3

Appendix No. 5 — continued

COUNTRY MAIN ROADS FUND — GENERAL PURPOSES — continued
SUMMARY OF EXPENDITURE FROM DEPARTMENT'S FUNDS ON CONSTRUCTION AND RECONSTRUCTION WORKS — continued

CONSTRUCTING AUTHORITY: D indicates Department; C indicates Council

City, Municipal or Shire Area	Road No	Location of Work	Class of Construction	Amount
TRUNK AND ORDINARY MAIN ROADS — continued				\$
Jemalong	238	10m to 12m from Eugowra	Reconstruction and bitumen surfacing . . C	10,000
do	238	3.3m to 10m north of Eugowra	do . . . C	7,174
do	238	3.1m to 9m north of Eugowra	do . . . C	7,000 *
do	350	7.6m to 10.7m north of Forbes	do . . . C	8,028 *
Jerilderie	323	5.6m to 13.2m from S.H. No. 17	do . . . C	1,865
do	552	Alguderie Creek, 7.2m west of Jerilderie	Prestressed concrete bridge C	471
do	552	8.3m to 12.3m west of Jerilderie	Reconstruction and bitumen surfacing . . C	2,078
do	552	2m to 8.3m west of Jerilderie	do . . . C	7,115
do	596	0m to 6.4m east of M.R. No. 321	do . . . C	5,000
Jindalee	78	2.31m to 2.74m and 3.86m to 15.23m north of Cootamundra	Widening to 34' formation and gravelling of shoulders C	8,000
do	78	Cootamundry Creek 1.37m south of Cootamundra	Steel and concrete bridge and approaches C	24,115
do	84	About 1m west of T.R. No. 78 at Wallenbeen	Reconstruction C	10,000
do	84	19.3m to 22.1m west from Murrumburrah	Reconstruction and bitumen surfacing . . C	3,128
do	84	21m to 25.49m from Murrumburrah	Reconstruction and bitumen surfacing including box culverts C	2,988 *
do	84	28.46m to 28.7m west of Murrumburrah	Reconstruction and bitumen surfacing . . C	113
do	84	20m to 22.1m west of Murrumburrah	do . . . C	422
do	84	Flagstaff Creek, 22.19m to 22.85m west of Murrumburrah	Bridge and approaches C	40,000
do	84	Silo Creek, 11.55m east of Murrumburrah	Reinforced concrete box culvert C	12,954
Kiama	264	7.5 to 9m west of Kiama	Reconstruction and bitumen surfacing . . C	2,292
Kyeamba	211	15m to 15.85m south of Wagga Wagga	Reconstruction C	981
do	211	Sandy Creek, 12.6m south of Wagga Wagga	Reinforced concrete box culvert and approaches C	11,000
do	384	21.96m to 25.51m from Wagga Wagga	Reconstruction and bitumen surfacing . . C	7,000
do	384	22.8m to 25.6m from Wagga Wagga	Reconstruction, bitumen surfacing and culverts C	10,426
do	384	Book Book, 24.76m south of Wagga Wagga	Reinforced concrete box culverts and Approaches C	12,000
do	384	15.4m south east of Wagga Wagga	Reinforced concrete box culvert C	1,426 *
Kyogle	83	Fairymount Creek, 17.9m north of Casino	Prestressed concrete bridge and approaches C	24,200
do	83	75.28m to 90.83m north of Grafton	Reconstruction and bitumen surfacing . . C	2,178
do	83	Railway viaducts at 0.3m, 9.4m and 9.95m north of Kyogle	Clearance increase C	12,000
Lachlan	57	16.9m to 20m south of Condobolin	Reconstruction and bitumen surfacing . . C	3,525
do	57	12.5m to 14.5m south of Condobolin	do . . . C	14,983
do	57	18.5m south of Tottenham	Improvement C	3,324 *
do	231	16.0m to 23.0m from Lake Cargelligo	Reconstruction and bitumen surfacing . . C	1,972 *
dp	231	21m to 24m east of Lake Cargelligo	do . . . C	3,159
do	371	0.4m to 1.4m from Lake Cargelligo towards Rankin Springs	do . . . C	1,972
Lake Macquarie	217	Bridge over Fennell's Bay, north of Toronto	Approaches C	1,467 *
do	217	Bridge over Cockle Creek	do C	3,506
do	217	Teralba Creek	Reinforced concrete box culvert C	1,623
do	217	Cross roads to Cockle Creek railway station	Reconstruction and bitumen surfacing . . C	245
do	223	Nelson Street to Callon Street	Reconstruction and bitumen surfacing . . C	20,792
do	325	Whitebridge	Railway overbridge C	3,370
do	325	Railway overbridge at Whitebridge	Approaches C	5,252
do	527	Winding Creek, Cardiff	Reinforced concrete bridge C	20,288
Lismore	65	0.78m to 2.96m from Lismore	Reconstruction and bitumen surfacing . . C	8,500
Liverpool Plains	55	Broken Dam Creek, 1.2m south of S.H. No. 11	Reinforced concrete box culvert C	6,272 *
do	357	Sandy Creek, 6.25m from Namoi Shire Boundary	Reinforced concrete bridge and approaches C	7,861 *
Lockhart	59	53.5m to 56m west of Wagga Wagga	Widening and strengthening C	2,283 *
do	78	19.83m to 22.28m south of S.H. No. 14	Reconstruction and bitumen surfacing . . C	2,283
Lyndhurst	246	5m to 7.4m south of Newbridge	do . . . C	2,457
do	246	2.0m to 3.6m from Newbridge	do . . . C	5,000
Macintyre	134	0.75m to 6.95m south of Delungra	Bitumen surfacing C	673 *
do	134	9.80m to 11.5m south of Delungra	Reconstruction and bitumen surfacing . . C	7,278
do	134	6.95m to 9.8m south of Delungra	Sealing C	1,500
do	187	Hunts Gully, 10m north of Inverell	Reinforced concrete bridge C	13,434
Maclean	151	Beyond 23.25m from Grafton	Reconstruction and bitumen surfacing . . C	8,783
do	152	Coldstream Street, Yamba	Relocation and construction C	103 *
Macleay	75	29.57m to 32m west of Kempsey	Reconstruction and bitumen surfacing . . C	13,706
Maitland	104	Bridge over Hunter River at Raymond Terrace	Approaches D	6,704 *
Manilla	357	8.1m to 11m west of Manilla	Reconstruction and bitumen surfacing . . C	20,000
Manning	90	Ward's Creek, 25.8m from S.H. No. 10 at Purfleet	Extension of Culvert C	2,856 *

* Credit

Appendix No. 5 — continued

COUNTRY MAIN ROADS FUND — GENERAL PURPOSES — continued

SUMMARY OF EXPENDITURE FROM DEPARTMENT'S FUNDS ON CONSTRUCTION AND RECONSTRUCTION WORKS — continued

CONSTRUCTING AUTHORITY: D indicates Department, C indicates Council

City, Municipal or Shire Area	Road No	Location of Work	Class of Construction	Amount
TRUNK AND ORDINARY MAIN ROADS — continued				\$
Manning	90	25.9m and 28.9m west of Purfleet	Reconstruction and bitumen surfacing . . C	1,522
do	90	25.8m to 32.05m from S.H. No.10	do . . . C	4,037
do	111	McCann's Corner, 6.5m from S.H. No.10	Curve elimination C	2,118
do	112	Bridge over Bo Bo Creek	Approaches C	12,891
Merriwa	62	Southern approach to bridge over Smith Rivulet	Drainage C	420 *
do	62	Murdering Hut Gully	Reinforced concrete box culvert and approaches C	1,386 *
do	62	20m to 23.6m west of Merriwa	Reconstruction and bitumen surfacing . . C	20,000
do	62	18m west of Merriwa to Borambil Creek	do . . . C	56,806
do	214	1.35m to 2.95m north of Ulan	do . . . C	2,137
do	214	1.55m to 2.5m south of T.R. No.62	do . . . C	3,918
Mittagong	258	7.75m to 9.26m from S.H. No.2	do . . . C	7,000
do	258	Wollondilly River at Goodmans Ford	Reinforced concrete bridge and approaches C	11 *
Molong	234	Castle Street level crossing, Molong	Improvement C	2,761
do	234	15m to 18.7m from Molong	Reconstruction and bitumen surfacing . . C	10,000 *
do	234	1.02m to 3.9m from S.H. No. 7	do . . . C	2,200 *
do	359	1.4m to 4.0m from Molong	do . . . C	10,765
do	359	9.2m from Molong	Improvement of crest C	3,113
Mulwaree	248	Whitehead's Creek, 11.5m from Goulburn	Reinforced concrete box culvert and approaches C	22,118
do	248	9.56m to 10.83m west of Goulburn	Partial reconstruction and surfacing . . C	6,287
do	248	10.85m to 12m west of Goulburn	Gravelling and bitumen surfacing . . . C	2,000
do	256	16.1m to 17.9m north of Goulburn	Reconstruction and bitumen surfacing . . C	5,000
do	376	14.4m to 15.4m from Goulburn	do . . . C	1,480
Mumbulla	272	12m to 16m from Bega	Reconstruction C	13,000
do	272	2.7m to 4.7m south of Bermagui	Reconstruction and bitumen surfacing . . C	7,868
Murrumbidgee	321	2.06m to 7.0m from Darlington Point	Widening C	10,000
do	596	11.2m to 15.9m east of M.R. No.321	Reconstruction and bitumen surfacing . . C	664 *
do	596	8m to 10.8m east of M.R. No. 321	do . . . C	4,064
Murrumburrah	84	0.8m to 2.15m east of Murrumburrah	Bitumen surfacing C	19,002 *
do	84	1.8m west of Murrumburrah	Reconstruction and bitumen surfacing . . C	19,527
Murrurundi	358	Millers Creek 15m from S.H. No.9	Reinforced concrete bridge C	5,000
do	358	5.09m to 7m from S.H. No. 9	Reconstruction and bitumen surfacing . . C	4,616
Nambucca	118	10.29m to 11.45m north of Macksville	Widening, strengthening and bitumen surfacing C	3,859
Namoi	72	Railway overbridge at Tibberina	Approaches C	4,794
do	127	Bobbina Creek, 10.8m west of Narrabri	Reinforced concrete box culvert and approaches C	7,500
do	127	46m to 51m west of Narrabri	Reformation and gravel surfacing . . . C	5,000
do	383	0m to 0.4m south of Pilliga	Reconstruction and bitumen surfacing . . C	400
Narraburra	241	10.1m to 13.5m east of Temora	do . . . C	1,499 *
do	241	12.07m to 15m east of Temora	do . . . C	19,499
do	398	3.75m to 5m north of Arianh Park	do . . . C	10,000
do	398	2.5m to 5m south of Arianh Park	do . . . C	4,500
do	398	Duck Creek, 11m east of Barmedman	Reinforced concrete bridge C	10,757
Newcastle	82	Turton Road to Lambton Road, Waratah	Construction and bitumen surfacing . . . C	2,465
do	82	Donald Street overbridge	Approaches C	4,932
do	82	Clarence Road to Newcastle Road	Reconstruction C	2,465 *
do	82	Donald Street overbridge	Extension of approaches C	7,000
do	108	Bridge over north arm of Hunter River	Approaches D	10,542 *
do	223	Rankin Park Hospital to Ridgeway Road	Reconstruction C	1,821 *
do	316	Selwyn Street, Tighes Hill	Removal of overbridge D	1,343
do	326	Bridges Road, from St. James Road to Carnley Avenue	Reconstruction C	9,178
do	326	Kahibah Road to Young Street	do C	11,236
do	326	Highfields Street to Bull Street	do C	24,000
do	603	Slip area near Carisbroke Avenue ^e	Investigation and remedial measures . . C	7,000
do	605	S.H. No. 23 to Larna Street, Waratah	Second carriageway C	22,244
Nundle	105	28.5m to 33.6m south of Tamworth	Gravelling and bitumen surfacing . . . C	5,135 *
do	105	Selected sections 28.5m to 33.3m south east of Tamworth	Reconstruction C	3,101 *
do	106	0m to 3m west of Nundle	Reconstruction and bitumen surfacing . . C	12,236
Nymboida	74	31.61m to 42.3m south of Grafton	Reconstruction and widening C	15,000
do	74	62.5m to 68.25m south of Grafton	Reconstruction and bitumen surfacing . . C	10,810
do	74	62.3m to 70.1m south of Grafton	do . . . C	7,427
do	74	58.05m to 59.02m south of Grafton	do . . . C	9,080
do	74	11.02m to 12.13m south of Grafton	do . . . C	750
do	74	23m to 24.3m south of Grafton	do . . . C	750 *
Oberon	253	20m to 22m south of Bathurst	do . . . D	3,118
do	253	3.0m to 4.5m south of Grafton	q do . . . C	4,350
Orange	245	Gardener Road to Huntley Street, Orange	Reconstruction C	2,316
do	526	Pinnacle Road Overbridge	Approaches C	588
Patrick Plains	128	Lamby Creek 18.35m from Singleton	Reinforced concrete bridge C	5,000

* Credit

Appendix No. 5 — continued

COUNTRY MAIN ROADS FUND — GENERAL PURPOSES — continued

SUMMARY OF EXPENDITURE FROM DEPARTMENT'S FUNDS ON CONSTRUCTION AND RECONSTRUCTION WORKS — continued

CONSTRUCTING AUTHORITY: D indicates Department; C indicates Council

City, Municipal or Shire Area	Road No	Location of Work	Class of Construction	Amount
TRUNK AND ORDINARY MAIN ROADS — continued				\$
Patrick Plains	213	2.42m to 4.2m from M.R. No. 503 towards Jerry Plains	Reconstruction and bitumen surfacing . . C	8,270
do	213	0.94m to 2.42m from M.R. No.503	do . . . C	6,000
do	503	Bridge over Macdonald River	Strengthening by undertrussing . . . D	468
Peel	130	Currabubula level crossing	Installation of "F" type signals . . . C	2,300
do	130	18.15m to 19.29m south of Tamworth	Reconstruction and bitumen surfacing . . C	19,336
Port Stephens	90	12 Mile Creek to Stroud Shire boundary	do . . . C	432 *
do	108	Fern Bay to junction with M.R. No.302	Proposed deviation C	8,991
do	108	8.64m to 9.3m from Newcastle City boundary	Reconstruction and bitumen surfacing . . C	44 *
do	108	6.54m to 7.30m north of Newcastle City boundary	Reconstruction C	533 *
do	301	Taylor's bridge, 0.2m from Woodville	Reinforced concrete bridge C	612
do	302	3m to 4.7m from S.H. No. 10	Reconstruction and widening C	1,189 *
Queanbeyan	51, 52	Monaro Street, Queanbeyan	Median strip C	7,939
do	51	0m to 0.53m west of Queanbeyan	Widening and median strip C	1,790
do	584	Fergus Road and Queanbar Street, Bulbar and Alanbar Streets	Reconstruction C	4,318
Rylstone	54	2.8m to 4.5m south of Ilford	Reconstruction and bitumen surfacing . . C	3,432
do	54	4.5m to 5.5m west of Ilford	do . . . C	15,000
do	54	2.8m to 4.5m south of Ilford	do . . . C	15,975
do	54	Four Mile Creek to Two Mile Creek	do . . . C	6,000
do	55	Bridge at 31.5m south of Mudgee	Approaches C	5,672
do	215	6.05m to 7.05m north of Rylstone	Reconstruction and bitumen surfacing . . C	14,252 *
do	215	8.4m to 8.8m north of Rylstone	do . . . C	4,849
do	215	7.3m to 8.4m north of Rylstone	Gravelling and bitumen surfacing . . . C	8,000
do	215	6.5m to 7.0m north of Rylstone	Reconstruction and bitumen surfacing . . C	18,449
Scone	62	21.66m to 25.17m west of Scone	do . . . C	15,000
do	105	Shallow Crossing, 40.5m east of Scone	Reinforced concrete bridge C	254 *
do	105	Hunter River at Ellerston	Reinforced concrete bridge and deviation C	21,075
do	105	0.2m to 3.06m east of Scone	Widening C	12,000
do	105	22.6m to 23.6m east of Scone	Reconstruction and bitumen surfacing . . C	17,039
Severn	382	9.3m to 11.3m west of Glen Innes	do . . . C	3,186 *
do	382	9.3m to 11.3m from Glen Innes	do . . . C	3,153
Shellharbour	522	Lake Illawarra Road to Bass Street	Dual carriageways C	15,000
do	522	Benson's Creek	Extension of reinforced concrete box culvert C	17,203
do	522	Woodford Avenue to Williams Avenue	Dual Carriageways C	8,000 *
do	522	Windang Bridge to Redall Parade	Southern approach C	7,000
Shoalhaven	267	Tiagara Creek 24m from Huskisson	Reinforced concrete bridge C	2,700
do	293	0.74m to 2.48m from S.H. No. 1	Widening C	480
Snowy River	286	15.5m west of Jindabyne	Turning circle D	1,242
do	286	8.5m to 20.5m west of Jindabyne	Reconstruction and asphaltic concrete surfacing D	315,302
do	286	20m to 22.3m west of Jindabyne	Reconstruction and bitumen surfacing . . D	16,945 *
do	286	22m to 23.2m west of Jindabyne	do . . . D	66
do	286	7.9m to 20m west of Jindabyne	Pavement restoration D	2,137
do	286	25m to 26m west of Jindabyne	Reconstruction and bitumen surfacing . . D	1,923
Stroud	90	Bridge over Stoney Creek, 5.2m south of S.H. No.10	Approaches C	40
do	111	21.4m to 24.8m from S.H. No.10	Reconstruction and bitumen surfacing . . C	2,683
do	111	10.1m to 11.2m from S.H. No.10	do . . . C	40 *
do	111	Dunn's creek at 3.7m and 4.0m south of Forster	Reinforced concrete box culvert C	6,000
do	111	Boolambayte Creek, 4.1m from S.H. No. 10	Prestressed concrete bridge C	3,000 *
do	111	Bridge over Boolambayte Creek, 4.1m from S.H. No. 10	Approaches C	3,000
do	289	Nooroo level crossing	Deviation C	7,500 *
do	289	Nooroo level crossing	Elimination by road deviation C	65,000
Talbragar	206	Fitzell's Creek	Reinforced concrete box culvert C	2,589
do	206	Bellmare Creek, 20.5m from Dubbo	Reinforced concrete bridge C	20,000
Tamarang	72	5.5m to 7.0m south of Quirindi	Reconstruction C	25,650
do	72	5.5m to 7.0m south of Quirindi	do . . . C	10,000 *
do	129	Warrah Creek, 15.15m west of Quirindi	Prestressed concrete bridge and approaches C	5,339
do	129	19.10m to 22.38m west of Quirindi	Reconstruction and bitumen surfacing . . C	10,000
do	129	16.5m to 19.05m west of Quirindi	do . . . C	5,055
Tenterfield Shire	361	Tooloom Creek at Urbenville	Reinforced concrete bridge C	3,339
Terania	65	Boatharbour Bridge, 4.75m north of Lismore	Improvement to alignment on northern approaches C	1,792
Timbregongie	89	14.9m south of Narromine	Reinforced concrete box culvert C	197 *
do	347	7.19m to 11.5m from Trangie	Reconstruction and bitumen surfacing . . C	10,000
do	347	7.6m to 10.1m south west of Trangie	do . . . C	500 *

* Credit

Appendix No. 5 — continued

COUNTRY MAIN ROADS FUND — GENERAL PURPOSES — continued

SUMMARY OF EXPENDITURE FROM DEPARTMENT'S FUNDS ON CONSTRUCTION AND RECONSTRUCTION WORKS — continued

CONSTRUCTING AUTHORITY: D indicates Department; C indicates Council

City, Municipal or Shire Area	Road No	Location of Work	Class of Construction	Amount
TRUNK AND ORDINARY MAIN ROADS — continued				\$
Timbreebongie	572	3.3m to 9m north of Narromine	Reconstruction and bitumen surfacing . . . C	366
Tintenbar	555	7.84m to 9.05m from S.H. No.10	do . . . C	1,530
do	555	6.5m to 7.84m from S.H. No. 10	do . . . C	7,518
Tomki	83	6.95m to 7.95m and 9m to 9.7m north from Casino	do . . . C	1,232
do	83	1.25m to 2.25m south of Casino	Reinforced concrete box culverts C	43 *
do	544	14.2m from Lismore	Reinforced concrete box culvert C	2,288
Tumbarumba	85	5.7m to 10.7m west of Tumbarumba	Reconstruction and bitumen surfacing . . C	5,610
do	282	11.2m to 14m from Tumbarumba	do . . . C	5,181
Tumut	85	3.11m to 6.4m from S.H. No. 4	do . . . C	8,690
do	85	Windowie Creek near Rileys Gap	Steel and concrete bridge and approaches C	41 *
do	85	Batlow	Realignment of curve C	6,000
do	279	4.4m to 5.3m from Tumut	Reconstruction and bitumen surfacing . . C	463
do	279	6.55m to 9.1m from Tumut	do . . . C	7,000
do	279	5.3m to 5.55m north of Tumut	do . . . C	974
do	279	9.1m to 11.1m north of Tumut	do . . . C	9,000
do	279	6.4m to 11.3m from Tumut	do . . . C	463 *
do	280	7m to 9.51m south of Adelong	do . . . C	12,000
Tweed	142	32m south of Lismore	do . . . C	1,972
do	143	3.52m to 4.28m from Murwillumbah	do . . . C	342
do	399	11.6m to 12.17m and 15.76m to 16.65m from Murwillumbah	do . . . C	1,972 *
do	399	15.1m to 15.76m from Murwillumbah	do . . . C	15,285
do	541	9.03m to 10.11m north of M.R. No.143	do . . . C	592
Ulmarra	74	Ti-Tree Creek, 6m south of Grafton	Approaches and pipe culvert C	11,660
Uralla	73	Church Gully, 17.22m north of Uralla	Reinforced concrete box culvert C	10,000
do	73	30.35m to 35.35m north of Uralla	Reconstruction and bitumen surfacing . . C	19,998
do	73	15.7m to 16.7m north of Uralla	do . . . C	2,425 *
do	124	Saumarez Creek, 5.5m west of Armidale	Reinforced concrete bridge C	2,037
Urana	59	Urana Creek, 0.3m west of Urana	Prestressed and reinforced concrete bridge and approaches C	29 *
do	385	15.5m to 19m north of Urana	Reconstruction and bitumen surfacing . . C	8,000
Wade	80	2.4m to 4.2m east of Griffith	do . . . C	1,538 *
do	80	1.5m to 2.4m and 4.2m to 10m east of Griffith	do . . . C	1,538
Wakool	319	Murrain Yarrein Creek, 37m north of Barham	Reinforced concrete bridge C	36,198
do	319	Edward River at Moulamein	do C	5,987
do	319	Bridge over Edward River at Moulamein	Approaches C	25,000
do	319	Bridge over Murrain Yarrein Creek	do C	19,000
do	319	19.5m to 24.5m from Barham	Reconstruction and bitumen surfacing . . C	2,068
Walcha	73	0.57m to 1.5m north of Walcha	do . . . C	16,897
Walgett	127	0.65m to 1.06m from Walgett	Gravelling and bitumen surfacing C	214
do	329	0.0m to 3.5m south of Pokataroo	Reconstruction and bitumen surfacing . . C	9,957
do	402	Grawin Creek, 42.4m west of Walgett	Reinforced concrete box culvert . . . C	3,720
Waugoola	56	Junction 1.9m south of Cowra	Reconstruction C	235
do	56	Kangaroo Creek near Gooloogong	Approaches C	10,654
do	56	Kangaroo Creek near Gooloogong	Prestressed concrete bridge C	7,000
do	237	23.4m to 26m from Grenfell	Reconstruction and bitumen surfacing . . C	10,000
do	576	Spring Creek, 6m from Cowra	Steel and concrete bridge C	32,535
do	576	10.1m to 12.5m from Cowra	Reconstruction and bitumen surfacing . . C	20,000
do	576	8.1m to 10.1m from Cowra	do . . . C	6,496
do	576	5.3m to 9.0m from Cowra	do . . . C	3,761 *
Weddin	237	Warraderry Creek, 8m from Grenfell	Reinforced concrete bridge C	15,000
do	237	6.0m to 9.4m north of Grenfell	Reconstruction and bitumen surfacing . . C	2,485 *
do	398	12.7m to 15.7m south of Grenfell	do . . . C	588 *
do	398	15.7m to 18.7m from Grenfell	do . . . C	1,830
do	398	18.7m to 21.7m from Grenfell	do . . . C	19,941
Wellington	206	Four Mile Creek, 22m from Dunedoo	Concrete bridge and approaches C	14,485
do	206	Spicers Creek, 32m from Dunedoo	Reinforced concrete bridge C	15,000
do	206	18.36m to 19.4m from Dunedoo	Reconstruction and bitumen surfacing . . C	33,350
do	206	28.5m to 32.0m from Dunedoo	do . . . C	4,500
do	233	15.0m to 19.0m from Wellington	Gravelling and bitumen surfacing C	8,000
do	233	27m to 27.8m west of Blayney	Climbing lane C	20,000
do	573	Railway level crossing at Apsley	Relocation C	22,121
Windouran	296	46m to 50m west of Deniliquin	Reconstruction and bitumen surfacing . . C	10,884
do	296	50m to 54m west of Deniliquin	do . . . C	6,000
do	296	54.5m to 58.5m west of Deniliquin	do . . . C	3,100
Wingham	192	Dennes Street, Wingham	do . . . C	53
Wingecarribee	264	0.5m to 2.0m from S.H. No. 25	do . . . C	20,000
Wollondilly	95	Third Point Creek, 5.37m west of Appin	Pipe culvert C	2,000
do	178	Carriage Creek, 14.7m from M.R. No. 178	Reinforced concrete box culvert and approaches C	8,000
do	179	Clements Creek, 5.24m west of M.R. No. 177	Reinforced concrete bridge C	720
do	179	Railway level crossing at Maldon	Installation of "F" type signals D	4,249 *

* Credit

Appendix No. 5 — continued

COUNTRY MAIN ROADS FUND — GENERAL PURPOSES — continued

SUMMARY OF EXPENDITURE FROM DEPARTMENT'S FUNDS ON CONSTRUCTION AND RECONSTRUCTION WORKS — continued

CONSTRUCTING AUTHORITY: D indicates Department; C indicates Council

City, Municipal or Shire Area	Road No	Location of Work	Class of Construction	Amount
TRUNK AND ORDINARY MAIN ROADS — continued				\$
Wollongong	95	5.5m to 6.15m north of Wollongong	Provision of additional lane. D	20,786
do	186	0m to 1.08m from S.H. No. 1	Reconstruction and widening C	2,000
do	295	Inner Harbour at Port Kembla	Alterations to transmission lines C	1,000 *
do	295	0m to 0.82m from S.H. No. 1	Asphaltic concrete surfacing C	1,021
do	295	Glastonbury Avenue to M.R. No. 568, Cringilla	Reconstruction C	1,000
do	513	Climbing lane, 0m to 5.8m south of S.H. No. 1	Resheeting D	2,344
do	568	Masters Road to Intersection with M.R. No. 295	Deviation C	962
do	581	Crown Street to Banks Street	Drainage C	223 *
do	581	Crown Street to S.H. No.1	Reconstruction and bitumen surfacing . . C	223
Woodburn	145	Bridge over Bungawalbyn Creek, 6.7m from Woodburn	Approaches C	436 *
do	153	3.6m to 5m east of S.H. No.10	Reconstruction and bitumen surfacing . . C	436
do	153	3.6m to 5m from S.H. No. 10 at Woodburn	do . . . C	10,090
Wyong	217	4.47m to 5.8m from S.H. No.10	do . . . C	13,968
do	335	0.71m to 1.64m at North Entrance	Deviation C	10,000
do	335	Tuggerah Lakes at The Entrance	Demolition of old wooden bridge C	6,000
do	336	1m south of M.R. No. 335 to Shire Boundary	Reconstruction C	14,000
Yallaroi	63	11.5m to 12.95m south of Warialda	Widening and bitumen surfacing C	5,000
do	63	Warialda Creek at Warialda	Steel and reinforced concrete bridge . . . D	773 *
Yarrowlumla	52	Letchworth	Railway overbridge D	968
do	268	18.48m to 20.48m from Queanbeyan	Reconstruction and bitumen surfacing . . C	2,773
do	584	5.29m to 7.86m from Queanbeyan	do . . . C	7,000
Young	78	1.24m to 2.61m north of Young	Widening C	6,255
Total — Trunk and Ordinary Main Roads				\$3, 979,893

TOURIST ROADS

Imlay	4037	2m to 3.57m from S.H. No. 1	Construction C	14,085
Maclean	4034	0.3m to 0.5m from M.R. No. 152	Reconstruction and bitumen surfacing . . C	1,700
Tintenbar	4051	Ballina to Skennar's Head	Construction C	24,840
Tweed	4028	0.68m to 2.0m south of Pottsville	do C	1,551
do	4028	Southwards from 1.85m south of Pottsville	Reconstruction and bitumen surfacing . . C	10,000
do	4028	0m to 0.64m from S.H. No. 10	Strengthening and bitumen surfacing . . . C	1,070
Ulmarra	4049	North from Wooli Road towards Sandon River	Construction C	7,985
Wade	4041	Airport Road to Beelbangera Road	Widening and gravelling C	6,400
Waugoola	4047	Within Wyangala National Park	Construction C	6,124
Total — Tourist Roads				\$73,755

ROADS OTHER THAN MAIN ROADS

Blaxland		Wallerawang Power Station	Access roads D	30,162
Wollongong		Mitchell Road to York Road	Construction of connecting road C	1,233 *
Manning		3.4m to 6.5m from Nabic	Reconstruction C	81
Muswellbrook Munic.		Muscle Creek in Bell Street	Reinforced concrete bridge C	3,660
do		Bell Street Overbridge	Widening C	16,000
Newcastle		Kooragang Island	Improvement to temporary route D	5,947
Talbragar		21.4m to 23.5m - Dubbo to Mendooran road	Reconstruction and bitumen surfacing . . C	12,000
do		Dubbo to Mendooran road - 24.4m to 27.4m	Reconstruction and bitumen surfacing . . C	14,000
Wentworth		Darling River at Pooncarie	Approaches C	6,917
Total — Roads other than Main Roads				\$87,534

SUMMARY

	\$	\$
Expressways	8,795	
State Highways	8,773,313	
Trunk and Ordinary Main Roads	3,979,893	12,762,001
Tourist Roads		73,755
Roads other than Main Roads		87,534
TOTAL		\$ 12,923,290
Survey, design, supervision, planning, etc.		4,094,634

Total as shown in Receipts and Payments Statements — Appendix No. 1 (c) (i)

\$17,017,924

* Credit

Appendix No. 5A

COUNTRY MAIN ROADS FUND – SPECIAL PURPOSES

SUMMARY OF EXPENDITURE FROM DEPARTMENT'S FUNDS ON CONSTRUCTION AND RECONSTRUCTION WORKS

CONSTRUCTING AUTHORITY: D indicates Department; C indicates Council

City, Municipal or Shire Area	Road No	Location of Work	Class of Construction	Amount
EXPRESSWAYS				\$
Sydney-Newcastle Expressway				
Gosford	X3	New Bridge over Hawkesbury River	Reinforced concrete super-structure . . . D	106,554 †
do	X3	New Bridge over Hawkesbury River	Reinforced concrete sub-structure . . . D	371,973 †
do	X3	New Bridge over Hawkesbury River	Rock fill for extension of abutments . . . D	29,238 †
				\$ 507,765
Southern Expressway				
Wollongong	X6	A.I. & S. unloading ramp	Prestressed concrete bridge D	26,271
do	X6	A.I. & S. siding and access road	do D	111,550
do	X6	Five Islands Road interchange	Reinforced concrete box culverts D	42,580
				\$ 180,401
Total — Expressways				\$ 688,166
STATE HIGHWAYS				
Princes Highway				
Imlay	1	Boydton Creek, 5.07m south of Eden	Reinforced concrete bridge D	30,556
do	1	Whelans Swamp, 7.15m south of Eden	do D	1,882
do	1	Wolumla Back Creek at Long Bridge, 10.2m south of Bega	Reinforced concrete box culvert D	6,693
Kiama	1	Bridge over Spring Creek, 0.5m north of Kiama	Provision of footway D	6,766
Mumbulla	1	Dry River at Quaama, 32.2m south of Narooma	Prestressed concrete bridge D	82,862
Shellharbour	1	Macquarie Rivulet, 13.3m south of Wollongong	do D	99,978
				\$ 228,737
Hume Highway				
Camden	2	Bridge over Nepean River at Camden	Steel and concrete super-structure . . . D	70,148 ††
do	2	Bridge over Nepean River at Camden	Reinforced concrete substructure D	23,337 ††
Goulburn City	2	Goulburn to S.H. No. 3	Reconstruction D	28,600 *
do	2	0.74m to 7.93m south of Goulburn	Construction of dual carriageway D	328,761
Gundagai	2	Daisy Bed Creek, 1.0m south of Coolac	Reinforced concrete bridge D	42,202
do	2	Bridge over Daisy Bed Creek, 1m south of Coolac	Approaches D	1,358
Gunning	2	Meadow Creek at Gunning	Prestressed concrete bridge and approaches D	17,386
Holbrook	2	Bridge over Billabong Creek, 29.4m south of Tarcutta	Approaches D	10,124
Hume	2	Eight Mile Creek, 33.2m south of Holbrook	Reinforced concrete box culvert D	14,613
do	2	Table Top Creek, 4.5m from Table Top	Reinforced concrete bridge D	26,328
do	2	Sweetwater Creek, 14.5m north of Table Top	Reinforced concrete & steel bridge D	62,883
do	2	Bridge over Table Top Creek, 26.6m south of Holbrook	Approaches D	61,150
do	2	Bridge over Sweetwater Creek	do D	5,253
Kyeamba	2	Tarcutta Creek at Tarcutta	Prestressed concrete bridge D	178,404
Mulwaree	2	Intersection with S.H. No.3	Construction of super-structure D	132,938
do	2	Intersection with S.H. No.3	Construction of substructure D	21,738
do	2	Intersection with S.H. No.3	Construction including dual carriageway D	585,242
do	2	Boxers Creek, 5.5m north of Goulburn	Reinforced concrete bridge D	46,116
do	2	Run-O-Waters Creek, 138.2m from Sydney	Prestressed concrete bridge D	60,333
do	2	Run-O-Waters Creek, 134.6m from Sydney	do D	96,990
Wingecarribee	2	Black Bobs Creek, 7.75m south of Berrima	do D	118,875
Wollondilly	2	Bridge over Bargo River at Tahmoor	Approaches D	2,420
				\$1, 877,999
Snowy Mountains Highway				
Gundagai	4	Yaven Yaven Creek Bridge, 2.8m east of S.H. No. 2	Approaches D	1,406
Imlay	4	Warragaburra Creek, 2.5m east of Bega	Reinforced concrete box culvert D	15,109
do	4	Parbery Creek, 2m east of Bega	Reinforced concrete bridge and approaches D	26,117
Snowy River	4	Bullock Head Creek, 0.5m west of Kiandra	Reinforced concrete bridge D	14,844
Tumut	4	Bridge over Gilmore Creek, 0.25m from Gilmore	Approaches D	1,170
				\$58,646
Great Western Highway				
Turon	5	Williamsons Springs on Yetholme	Prestressed concrete bridge D	53,770
				\$53,770
Mid Western Highway				
Bland	6	Back Creek, 48.3m west of Grenfell	Reinforced concrete bridge D	45,074

† For Additional Expenditure see Appendix No. 4A

†† For Additional Expenditure see Appendix No. 3

* Credit

Appendix No. 5A — continued

COUNTRY MAIN ROADS FUND — SPECIAL PURPOSES — continued

SUMMARY OF EXPENDITURE FROM DEPARTMENT'S FUNDS ON CONSTRUCTION AND RECONSTRUCTION WORKS — continued

CONSTRUCTING AUTHORITY: D indicates Department; C indicates Council

City, Municipal or Shire Area	Road No	Location of Work	Class of Construction	Amount
STATE HIGHWAYS — continued				
Mid Western Highway — continued				
Bland	6	Back Creek Bridge, 48.3m west of Grenfell	Approaches D	53,607
				\$98,681
Mitchell Highway				
Darling	7	Cuffs Creek, 82m north of Bourke	Approaches D	23,575
Dubbo	7	Macquarie River at Dubbo	Reinforced concrete bridge D	6,011
do	7	Bridge over Macquarie River at Dubbo	Post structural adjustments D	3,951
Talbragar	7	Willandra Creek, 8.5m west of Dubbo	Reinforced concrete bridge D	57,519
do	7	Bridge over Eulomongo Creek, 7m east of Dubbo	Widening D	16,834
				\$107,890
Barrier Highway				
Central Darling	8	21m to 34m east of Wilcannia	Reconstruction and bitumen surfacing . . D	95,778 †
do	8	34m to 51m east of Wilcannia	do . . . D	252,125
do	8	0m to 7m east of Wilcannia	do . . . D	334,063
				\$681,966
New England Highway				
Greater Cessnock	9	Anvil Creek at Branxton	Prestressed concrete bridge D	38,661
do	9	Bridge over Anvil Creek at Branxton	Approaches D	4,026
Murrurundi	9	Bridge over Pages River at Murrurundi	do D	15,044
do	9	Pages River at Murrurundi	Reinforced concrete bridge D	5,098
Muswellbrook Munic.	9	Muscle Creek	Precast and reinforced concrete bridge . D	109,943
do	9	Bridge over Muscle Creek	Approaches D	1,951
Newcastle	9	Weakleys Flat Creek at Beresfield	Reinforced concrete bridge D	48,222
Peel	9	Bridge over Swamp Creek, 41.1m north of Murrurundi	Widening D	10,875
Tamarang	9	Spring and Kangaroo Creek Bridges	Approaches D	47,383
				\$281,203
Pacific Highway				
Bellingen	10	South Arm of Bellingen River at Urunga	Reinforced concrete bridge D	136,796
do	10	Bridge over South Arm of Bellingen River at Urunga	Approaches D	45,416
Coffs Harbour	10	Pine Brush Creek, 4.5m north of Coffs Harbour	Reinforced concrete bridge D	36,948
do	10	4.2m north of Coffs Harbour on Kororo deviation	Pedestrian overbridge D	26,119
Nambucca	10	Lower Warrell Creek, 2m south of Macksville	Prestressed concrete bridge D	347,858
Stroud	10	Myall River at Bulahdelah	do D	8,101
do	10	Myall River Bridge at Bulahdelah	Approaches D	1,174
Tintenbar	10	Richmond River at Wardell	Reconstruction of Dolphin & Fender system D	131,259
Tweed	10	Bridge over Dinseys Creek, 50.5m north of Murwillumbah	Widening D	25,113
Woodburn	10	10.5m south of Woodburn	Steel and concrete bridge D	3,110
Wyong	10	Ourimbah Creek, 7.91m north of Gosford	Steel & reinforced concrete bridge . . . D	2,712
do	10	Bridge over Bangalow Creek, 6.15m north of Gosford	Widening D	74,717
				\$839,323
Oxley Highway				
Gilgandra	11	Nargon Creek, 27m from Gilgandra	Widening D	6,746
Hastings	11	Kings Creek, 10.81m west of Port Macquarie	Reinforced concrete bridge and approaches D	8,414
do	11	Yarras Creek, 42.76m west of Port Macquarie	Reinforced concrete box culvert D	56,467
Walcha	11	Stoney Creek, 13.3m east of Walcha	Prestressed concrete bridge D	139,551
do	11	Tiara Creek, 18.2m east of Walcha	Culvert D	32,197
do	11	Tia River, 22.2m east of Walcha	Prestressed concrete bridge D	12,525
				\$255,900
Sturt Highway				
Balranald	14	Bridge over Murrumbidgee River at Balranald	Approaches D	30,970
Kyeamba	14	14.18m west of S.H. No. 2	Reinforced concrete box culvert D	1,724
				\$32,694
Bruxner Highway				
Ashford	16	Little Oak Creek, 11.1m east of Bonshaw	Reinforced concrete bridge D	37,511
do	16	Big Oak Creek, 9.6m east of Bonshaw	Reinforced concrete box culvert D	22,797
do	16	Horse Gully, 13.9m and 14.7m west of Bonshaw	Reinforced concrete box culverts D	11,986

† For Additional Expenditure See Appendix No. 5

Appendix No. 5A — continued

COUNTRY MAIN ROADS FUND — SPECIAL PURPOSES — continued

SUMMARY OF EXPENDITURE FROM DEPARTMENT'S FUNDS ON CONSTRUCTION AND RECONSTRUCTION WORKS — continued

CONSTRUCTING AUTHORITY: D indicates Department; C indicates Council

City, Municipal or Shire Area	Road No	Location of Work	Class of Construction	Amount
STATE HIGHWAYS — continued				\$
Bruxner Highway — continued				
Ashford	16	Oaky Creek, 12.5m west of Bonshaw	Prestressed concrete bridge D	32,315
do	16	Bentley Springs Creek, 6.25m east of Bonshaw	Reinforced concrete box culvert D	12,711
do	16	Lickinghole Creek, 9.9m and 10.4m west of Bonshaw	Prestressed concrete bridges D	59,051
do	16	Dinner Corner Creek, 15.35m west of Bonshaw	Prestressed concrete bridge D	32,655
do	16	Towell Creek, 5.1m east of Bonshaw	Box Culvert D	998
do	16	6.42m west of Bonshaw	Reinforced concrete box culvert D	1,310
Gundurimba	17	Loftville Creek, 3.1m west of Lismore	Prestressed concrete bridge D	87,304
do	16	Loftville Creek Bridge	Approaches D	16,510
Kyogle	16	Piora Bridge, Deep Creek, 14m west of Casino	Reinforced concrete bridge and approaches D	1,512
Tenterfield Shire	16	40m west of Casino	Prestressed concrete bridge D	9,372
do	16	Ti-Tree Creek, 5.2m east of Drake	Steel & concrete bridge D	96,411
				\$ 422,443
Newell Highway				
Gilgandra	17	Marthaguy Creek, 33.19m, 34.47m and 37.88m north of Dubbo	Widening D	93,039
Namoi	17	Bobbiwaa Creek, 10.8m north of Narrabri	Approaches D	30,566
do	17	Spring Creek, 8.55m north of Narrabri	do D	2,269
do	17	Bridge over Spring Creek, 8.55m north of Narrabri	Reinforced concrete bridge D	23,482
do	17	Bridge over Bobbiwaa Creek, 16.8m north of Narrabri	do D	31,985
				\$ 181,341
Castlereagh Highway				
Walgett	18	Bridge over Cumberdoon Creek, 4.6m south of Walgett	Widening D	16,813
do	18	Warrambool, 35m north of Walgett	Reinforced concrete box culvert D	43,277
				\$ 60,090
Monaro Highway				
Monaro	19	Bridge over Michelago Creek 45.9m to 46.5m south of Canberra.	Approaches D	11,295
do	19	Bridge over Gungoandra Creek	do D	3,577
				\$ 14,872
Riverina Highway				
Berrigan and Conargo	20	Irrigation canals, 5m to 31m east of Deniliquin	Widening of bridges D	69,411
Berrigan and Conargo	20	Irrigation canals, 5m and 31m east of Deniliquin and 36m east of Finley	Widening of approaches D	1,212
				\$ 70,623
Cobb Highway				
Deniliquin	21	Edwards River at Deniliquin	Prestressed concrete bridge D	12,806
Hay	21	Murrumbidgee River at Hay	do D	57,469
do	21	Bridge over Murrumbidgee River at Hay	Approaches D	255
				\$ 70,530
Silver City Highway				
Broken Hill	22	South Road, Broken Hill	Railway overbridge D	17,267
do	22	South Road and Gypsum Street, Broken Hill	Approaches to overbridge D	43,697
do	22	South Road, Broken Hill	Railway overbridge D	18,538
do	22	South Road and Gypsum Street, Broken Hill	Pavement construction of approaches D	60,776
Wentworth	22	Bridge over Darling River at Wentworth	Approaches D	3,309
do	22	Bridge over Tuckers Creek	Approaches D	159,056
do	22	Tuckers Creek, 0.3m east of Wentworth	Reinforced concrete bridge D	81,621
				\$ 384,264
Illawarra Highway				
Wingecarribee	25	Paynes Creek, 3m west of Moss Vale	Reinforced concrete box culvert and approaches D	15,187
				\$ 15,187
Total — State Highways				\$ 5,736,159
TRUNK AND ORDINARY MAIN ROADS				
Bibbenluke	91	Yellow Waterhole Creek, 12.8m east of Bombala	Reinforced concrete bridge D	3,950
do	91	Dragon Swamp, 9.1m east of Bombala	Steel and concrete bridge D	22,883
Blaxland	55	Over S.H. No. 5, 4.4m west of Lithgow	Prestressed concrete bridge D	2,437
Lake Macquarie	217	Cockle Creek, at Speer's Point	Reinforced concrete bridge D	49,776

Appendix No. 5A — continued

COUNTRY MAIN ROADS FUND — SPECIAL PURPOSES — continued

SUMMARY OF EXPENDITURE FROM DEPARTMENT'S FUNDS ON CONSTRUCTION AND RECONSTRUCTION WORKS — continued

CONSTRUCTING AUTHORITY: D indicates Department; C indicates Council

City, Municipal or Shire Area	Road No	Location of Work	Class of Construction	Amount
TRUNK AND ORDINARY MAIN ROADS — continued				\$
Lake Macquarie	217	South Channel, Cockle Creek	Temporary bridge D	12,267
Maitland	104	Hunter River at Raymond Terrace	Reinforced concrete bridge D	2,831
Newcastle	108	North arm of Hunter River	Eastern Approach D	70,443
do	108	North arm of Hunter River	Western Approach D	104,342
do	108	North arm of Hunter River	do D	8,107
do	108	North arm of Hunter River	Reinforced concrete bridge D	618,166 *
Peel	130	Werris Creek at Werris Creek	Prestressed concrete bridge D	7,267
Tweed	142	Tweed River at Murwillumbah	do D	10,990
Wollongong	295	Bridge over A.I.S. Line	Duplication C	23
do	295	A.I.S. Jetty Line at Port Kembla	Overbridge C	700 *
do	568	Masters Road to Intersection with		
	581	Main Road No. 295	Deviation C	962 *
Total — Trunk and Ordinary Main Roads				\$ 911,820

ROADS OTHER THAN MAIN ROADS

Gosford		Brisbane Waters at "The Rip"	Prestressed concrete bridge D	6,604
Wollongong		Byarong Avenue	Pedestrian overbridge D	1,144
Total — Roads Other than Main Roads				\$ 7,748

SUMMARY

	\$	\$
Expressways	688,166	
State Highways	5,736,159	
Trunk and Ordinary Main Roads	<u>911,820</u>	7,336,145
Roads Other than Main Roads		<u>7,748</u>
Total as shown in Receipts and Payments Statements Appendix No. 1 (C) (ii)		<u>\$ 7,343,890</u>

† For additional expenditure see Appendix No. 3

Appendix No. 6

COUNTY OF CUMBERLAND MAIN ROADS FUND

PAYMENTS FOR MAINTENANCE AND MINOR IMPROVEMENT OF MAIN ROADS, BRIDGES AND FERRIES
DURING THE YEAR 1970-71

WORK BY COUNCILS

City, Municipal or Shire Area	State Highways	Tourist and Ordinary Main Roads	Secondary Roads	Total
Ashfield	\$	\$ 6,000	\$	\$ 6,000
Auburn		80	2,920	3,000
Bankstown			1,000	1,000
Baulkham Hills		39,684	6,726	46,410
Blacktown		2,131 *	23,700	21,569
Blue Mountains		6,955	1,543	8,500
Botany		2,760		2,760
Burwood		181	819	1,000
Camden		4,710		4,710
Campbelltown		9,441		9,441
Canterbury		6,000	6,500	12,500
Colo		26,409		26,409
Concord		7,731	1,753	9,484
Drummoyne		4,000		4,000
Fairfield		3,471 *	15,153	11,682
Holroyd			500	500
Hornsby		17,999	2,809	20,808
Hunters Hill			300	300
Hurstville		8,000		8,000
Kogarah		9,000		9,000
Ku-ring-gai		16,200	2,800	19,000
Lane Cove			2,170	2,170
Leichhardt		7,600	4,900	12,500
Liverpool		13,800	208	14,008
Manly		9,630	1,813	11,443
Marrickville		26,000		26,000
Mosman		5,800	350	6,150
North Sydney		12,500	500	13,000
Parramatta			500	500
Penrith		7,600		7,600
Randwick		6,000		6,000
Rockdale		6,546	32,454	39,000
Ryde		17,877 *	17,877	-
South Sydney	6,445	11,324	7,803	25,572
Strathfield		2,353	2,947	5,300
Sutherland		25,373	37,010	62,383
Sydney	19,000	57,000		76,000
Warringah		58,000		58,000
Waverley		7,680		7,680
Willoughby		4,000		4,000
Windsor		500	4	504
Wollondilly		13,000		13,000
Woollahra		16,058	166	16,224
	\$25,445	\$432,435	\$ 175,227	\$ 633,107

Allowances to Councils for Supervision, Long Service Leave etc.

13,015

Total shown in Receipts & Payments Statement — Appendix No. 1 (B) (i)

\$ 646,122

* Credit

Appendix No. 6A

COUNTY OF CUMBERLAND MAIN ROADS FUND

PAYMENTS FOR MAINTENANCE AND MINOR IMPROVEMENT OF MAIN ROADS, BRIDGES AND FERRIES
DURING THE YEAR 1970-71

WORK BY DEPARTMENT

Road No.	Location of Work	Amount	Total
EXPRESSWAYS		\$	\$
X1	Warringah From Macquarie Street to Sydney Harbour Bridge and then northwards including landscaped areas, overbridge, ramps, pavements, etc.	194,327	
X3	Lane Cove Valley From Wolseley Street to Gladesville Hospital and from Gladesville Bridge to northern approaches Fig Tree Bridge including overpasses, loading and off-loading ramps	90,471	
X6	Southern Fraters Avenue to Holt Road including surfaced footways of Captain Cook Bridge	25,922	
X9	Southern Cross Drive From Epsom Road to Wentworth Avenue, including landscaped areas, pavements, etc.	63,857	
Total — Expressways			<u>374,577</u>

Appendix No. 6A — continued

COUNTY OF CUMBERLAND MAIN ROADS FUND — continued

PAYMENTS FOR MAINTENANCE AND MINOR IMPROVEMENT OF MAIN ROADS, BRIDGES AND FERRIES DURING THE YEAR 1970-71 — continued

Work by Department — continued

Road No.	Location of Work	Amount	Total
		\$	\$
	STATE HIGHWAYS		
1	Princes Highway - May Street, St. Peters to the northern boundary of the City of Wollongong at Waterfall.	150,125	
	Northern boundary of the City of Wollongong to Main Road No. 185 at Thirroul (boundary of County of Cumberland)	142,172	292,297
2	Hume Highway — State Highway No. 5 (Great Western Highway) to the western boundary of the City of Liverpool	153,061	
	Leppington Corner to the Nepean River at Camden including Camden Bridge (boundary of County of Cumberland)	64,794	217,855
5	Great Western Highway - Johnstons Creek, Camperdown to the western boundary of the City of Penrith	204,461	
	Eastern boundary of the City of Blue Mountains to the eastern boundary of Blaxland Shire at Victoria Pass.	80,781	285,242
10	Pacific Highway - Alfred Street, North Sydney to Pearce's Corner at State Highway No. 13 (Pennant Hills Road) Wahroonga	58,921	
	State Highway No. 13 (Pennant Hills Road) Wahroonga at Pearce's Corner to the southern abutment of Peats Ferry Bridge	77,025	135,946
13	State Highway No. 2 (Hume Highway) at Carramar to State Highway No. 10 (Pacific Highway), Wahroonga at Pearce's Corner	66,988	66,988
	Total — State Highways		998,328
	ORDINARY MAIN ROADS		
139	Main Road No. 200 to Main Road No. 162 at Top Ryde and from Bridge over the railway line at Epping to Main Road No. 373 (Carlingford Road)	498	
154	Main Road No. 184 at Windsor to 9.0m south of State Highway No. 5 (Great Western Highway)	61,001	
155	Main Road No. 184 at Richmond to Main Road No. 570 at Yarramundi	14,705	
158	Victoria Road, Ermington to Pennant Hills Road, Carlingford	14,871	
162	Pittwater Road, Mona Vale to First Rocks, St. Ives	48,231	
	Major bridges on council controlled length	7,608	
163	Main Road No. 184 to Richmond Air Station	941	
164	Narrabeen Lagoon to Beach Road, Palm Beach, including Narrabeen Bridges	53,294	
	Major bridges on council controlled lengths	43,096	
165	Glebe Island Bridge to Church Street, Parramatta	326,993	
166	Main Road No. 373, (Epping Road), Lane Cove to Main Road No. 185 (Victoria Road), Gladesville	31,366	
167	From Griffiths Street, Hurlstone Park to Salt Pan Creek	25,600	
	Salt Pan Creek, Bankstown to Main Road No. 512 at Liverpool	36,103	
170	Gardners Road to Bumborah Point Road, Bunnerong	13,828	
171	Allison Road, Randwick to La Perouse	23,398	
172	Northern side from Jersey Road, Woollahra, to Queen Street and thence full width to Main Road No. 340 (Bronte Road), Bondi Junction	6,348	
174	Main Road No. 162 (Mona Vale Road), Terrey Hills, to the western end of General San Martin Drive near McCarrs Creek	9,635	
175	Main Road No. 171 (Bunnerong Road), Matraville to Prince Henry Hospital	1,205	
177	Om at State Highway No. 2 (Hume Highway) to 1.40m at the southern boundary of the City of Liverpool	5,357	
	Cross Roads to the southern boundary of Campbelltown Municipality at 16.71m and from 26.11m to State Highway No. 1 (Princes Highway) at 29.62m.	77,749	
178	Main Road No. 177 Campbelltown to State Highway No. 2 (Hume Highway) at Narellan	31,093	
181	Main Road No. 184 at McGraths Hill to Webbs Creek Ferry	24,669	
182	Main Road No. 184 at Windsor to the Hawkesbury River including Hawkesbury River Bridge	1,920	
183	Anzac Parade, Kingsford to State Highway No. 1 (Princes Highway), Sydenham	10,391	
184	State Highway No. 13 (Pennant Hills Road) Parramatta to State Highway No. 5 (Great Western Highway) at Mount Victoria	148,722	
185	State Highway No. 1 (Princes Highway) at Helensburgh to State Highway No. 1 at Thirroul	79,170	
190	Bankstown Municipal boundary to Main Road No. 167.	7,354	
194	Botany Road, Mascot to Cooks River, Kyeemagh, including Cooks River Bridge	91,178	
199	Ramsgate Road, Ramsgate to Taren Point including Captain Cook Bridge	5,773	
	Major Bridges on council controlled lengths	14,720	
200	Ryde Bridge to Blaxland Road	34,145	
225	Main Road No. 181 at Wisemans Ferry Village to Wisemans Ferry	1,571	

Appendix No. 6A — continued
COUNTY OF CUMBERLAND MAIN ROADS FUND — continued
 PAYMENTS FOR MAINTENANCE AND MINOR IMPROVEMENT OF MAIN ROADS, BRIDGES AND
 FERRIES DURING THE YEAR 1970-71 — continued

Work by Department — continued

Road No.	Location of Work	Amount	Total
ORDINARY MAIN ROADS — continued		\$	\$
309	State Highway No. 5 (Great Western Highway) to Main Road No. 574, (Kissing Point Road)	14,057	
315	State Highway No. 2 (Hume Highway), Enfield to Broadarrow Road, Beverly Hills	27,143	
317	Main Road No. 171 (Bunnerong Road), Matraville to Marine Parade, Maroubra	7,129	
327	Anzac Parade, Moore Park to Belmore Road, Randwick	4,750	
328	Bridge over Middle Harbour at Roseville to Main Road No. 164 (Pittwater Road), Brookvale including Roseville Bridge	62,174	
344	Main Road No. 171 (Bunnerong Road) Matraville to Frogmore Street, Mascot	6,422	
366	Entrance to Kuring-gai Chase at 4m north of State Highway No. 10 (Pacific Highway) at Turrumurra to Mount Colah Lodge gates	12,269	
373	Terry's Creek, Epping to Lane Cove River, including Lane Cove River Bridge	13,446	
	Pacific Highway to Lane Cove River including Lane Cove River Bridge	15,652	
393	State Highway No. 1 (Princes Highway) at Loftus to Main Road No. 185 at Bald Hill and from State Highway No. 1 at Waterfall to Main Road No. 393 at Upper Causeway	44,159	
397	Montauban Avenue to Main Road No. 164 at Narrabeen	39,230	
508	State Highway No. 2 (Hume Highway) to Salt Pan Creek	85,688	
512	State Highway No. 1 (Princes Highway) at Heathcote to Deadmans Creek at the boundary of Liverpool City	26,049	
	Deadmans Creek to State Highway No. 2 (Hume Highway) at Liverpool	12,664	
513	State Highway No. 1 (Princes Highway) at the top of Bulli Pass to 0.4m (Boundary of County of Cumberland)	88	
515	Main Road No. 608 at Liverpool to State Highway No. 5 (Great Western Highway) at Eastern Creek	47,703	
516	Main Road No. 184 at Bell to the eastern boundary of Blaxland Shire	595	
525	Main Road No. 174 (McCarrs Creek Road) at McCarrs Creek to Main Road No. 174 near Terrey Hills, including McCarrs Creek Bridge	19,652	
532	Main Road No. 165 to State Highway No. 5 Auburn	7,524	
535	Badgerys Creek to Main Road No. 154	2,775	
536	Main Road No. 535 to State Highway No. 5 (Great Western Highway) at St. Marys	14,375	
537	South Creek Bridge to Main Road No. 184 at Richmond	12,451	
570	Main Road No. 155 at Agnes Banks to the eastern boundary of the City of Blue Mountains	15,079	
574	Main Road No. 165 (Victoria Road), Rydalmere to Main Road No. 158 (Marsden Road) Dundas	23,392	
587	State Highway No. 10 (Pacific Highway) at Hornsby to State Highway No. 10 at Asquith	222	
592	Cahill Expressway from Macquarie Street to Sir John Young Crescent	184,383	
599	From Suspension Bridge to Babbage Road including link to Boundary Street	15,377	

Total — Ordinary Main Roads 1,966,981

SECONDARY ROADS

2034	Major Bridges on Council controlled length	1,176	
2076	Roadworks	310	

Total — Secondary Roads 1,486

TOURIST ROADS

4005	Main Road No. 525 (General San Martin Drive) to West Head	10,557	
4020	Main Road No. 393 to Wattamolla Beach through Royal National Park	2,205	
4025	Main Road No. 393 to Garie Beach through Royal National Park	2,677	
4026	Main Road No. 162 to Main Road No. 191 through Lane Cove National Park	653	
4031	Captain Cook Drive to Cape Solahder	1,475	

Total — Tourist Roads 17,567

SUMMARY

Expressways	374,577	
State Highways	998,328	
Ordinary Main Roads	<u>1,966,981</u>	3,339,886
Secondary Roads		1,486
Tourist Roads		17,567
Bridges and ferries not on classified roads		88,689
Maintenance of Median, strips and minor road restorations		72,358
Supervision, testing laboratory working expenses (net), traffic striping, signposting, suspense and operating accounts, etc.		<u>1,026,400</u>
Total as shown in Receipts and Payments Statements — Appendix No.1 (B) (i)		<u>\$ 4,546,386</u>

Appendix No. 7

COUNTRY MAIN ROADS FUND

PAYMENTS FOR MAINTENANCE AND MINOR IMPROVEMENT OF MAIN ROADS, BRIDGES AND
FERRIES DURING THE YEAR 1970-71

WORK BY COUNCILS

City, Municipal or Shire Area	State Highways	Trunk, Tourist and Ordinary Main Roads	Total
	\$	\$	
Abercrombie		33,000	33,000
Albury		2	2
Armidale City	8,173	926	9,099
Ashford	15,848	43,680	59,528
Ballina	1,405	2,915	4,320
Balranald	1,131	40,066	41,197
Barraba		22,634	22,634
Bathurst City			
Bega		376	376
Bellingen		32,967	32,967
Berrigan		19,300	19,300
Bibbenluke	25,750	22,243	47,993
Bingara		26,450	26,450
Bland		39,500	39,500
Blaxland		18,000	18,000
Bogan	6,100	41,843	47,943
Bombala	3,692	1,590	5,282
Boolooroo	11,776	8,407	20,183
Boomi	140	32,857	32,997
Boorowa		28,561	28,561
Boree		49,167	49,167
Bowral		1,000	1,000
Brewarrina		51,296	51,296
Broken Hill	14,298	8,332	22,630
Burrangong		40,888	40,888
Byron		31,085	31,085
Camden		3,090	3,090
Canobolas		24,615	24,615
Carrathool		88,105	88,105
Casino	3,292	3,797	7,089
Central Darling	348	76,918	77,266
Cobar	389	68,992	69,381
Cockburn		25,518	25,518
Coffs Harbour		21,605	21,605
Colo		33,359	33,359
Conargo		6,193	6,193
Condobolin		1,000	1,000
Coolah		37,796	37,796
Coolamon		16,000	16,000
Cooma	2,331	360	2,691
Coonabarabran		32,875	32,875
Coonamble		40,865	40,865
Cootamundra		7,963	7,963
Copmanhurst		34,561	34,561
Corowa			
Cowra	5,678	2,718	8,396
Crookwell		64,952	64,952
Cudgegong		50,000	50,000
Culcairn		12,500	12,500
Darling		74,400	74,400
Demondrille		29,499	29,499
Deniliquin	5,200	1,900	7,100
Dubbo	2,000	1,100	3,100
Dumaresq		55,867	55,867
Dungog		23,210	23,210
Eurobodalla		29,591	29,591
Forbes	2,000	7,000	9,000
Gilgandra		10,440	10,440
Glen Innes	2,978	350	3,328
Gloucester		15,710	15,710
Goobang		71,734	71,734
Goodradigbee		51,239	51,239
Gosford	675	64,945	65,620
Goulburn City	402	6,739	7,141
Grafton City	910	3,686	4,596
Greater Cessnock		65,420	65,420
Grenfell	500	1,353	1,853
Gundagai		31,894	31,894
Gundurimba	9,986	26,039	36,025
Gunnedah	2,011	8,898	10,909
Gunning		20,000	20,000
Guyra		21,433	21,433
Hastings		9,522	9,522
Hay	3,245	28,713	31,958
Holbrook		32,579	32,579
Hume		25,500	25,500
Illabo		37,455	37,455
Imlay		36,000	36,000
Inverell	3,201	2,757	5,958
Jemalong	42,410	13,046	55,456
Jerilderie		12,667	12,667
Jindalee		38,341	38,341
Junee		2,216	2,216
Kempsey	1,663	2,980	4,643

Appendix No. 7 — continued

COUNTRY MAIN ROADS FUND — continued

PAYMENTS FOR MAINTENANCE AND MINOR IMPROVEMENT OF MAIN ROADS, BRIDGES AND
FERRIES DURING THE YEAR 1970-71 — continued

Work by Councils — continued

City, Municipal or Shire Area	State Highways	Trunk, Tourist and Ordinary Main Roads	Total
	\$	\$	\$
Kiama		10,000	10,000
Kyeamba		12,312	12,312
Kyogle	8,696	51,610	60,306
Lachlan		117,701	117,701
Lake Macquarie	1,189	71,346	72,535
Leeton		14,500	14,500
Lismore	7,050	9,677	16,727
Lithgow		6,000	6,000
Liverpool Plains	12,244	36,653	48,897
Lockhart		25,000	25,000
Lyndhurst		7,500	7,500
Macintyre	15,000	17,563	32,563
Maclean		20,117	20,117
Macleay		29,097	29,097
Maitland	510	27,894	28,404
Manilla		18,378	18,378
Manning		29,612	29,612
Merriwa		40,582	40,582
Mitchell		26,060	26,060
Mittagong		34,500	34,500
Molong		22,714	22,714
Monaro		1,432	1,432
Moree	5,822	268	6,090
Mudgee		1,143	1,143
Mullumbimby		2,759	2,759
Mulwaree		94,142	94,142
Mumbulla		22,759	22,759
Murray		14,079	14,079
Murrumbidgee		35,216	35,216
Murrumburrah		4,821	4,821
Murrurundi		6,626	6,626
Muswellbrook Municipality	308	86	394
Muswellbrook Shire		22,372	22,372
Nambucca		10,000	10,000
Namoi		107,896	107,896
Narrabri	7,502	2,710	10,212
Narraburra		34,427	34,427
Narrandera		8,800	8,800
Newcastle	25,063	18,433	43,496
Nundle		5,548	5,548
Nymboida		35,070	35,070
Nyngan	545	509	1,054
Oberon		25,632	25,632
Orange	3,341	5,998	9,339
Parkes		1,741	1,741
Patrick Plains		29,609	29,609
Peak Hill		500	500
Peel	39,522	12,721	52,243
Port Macquarie	2,306	6,015	8,321
Port Stephens		56,208	56,208
Queanbeyan		17,641	17,641
Quirindi		3,696	3,696
Rylstone		23,000	23,000
Scone		19,701	19,701
Severn	7,317	13,555	20,872
Shellharbour		6,000	6,000
Shoalhaven		25,000	25,000
Singleton	77	958	1,035
Snowy River		24,665	24,665
Stroud		42,358	42,358
Talbragar		6,300	6,300
Tallaganda		92,010	92,010
Tamarang		34,944	34,944
Tamworth	3,428	5,047	8,475
Taree	2,900	675	3,575
Temora	—	1,800	1,800
Tenterfield Municipality	3,727	3,758	7,485
Tenterfield Shire	96,029	3,758	99,787
Terania		72,750	72,750
Timbregongie		41,825	41,825
Tintenbar	5,195	3,152	8,347
Tomki	6,966	30,864	37,830
Tumbarumba		18,124	18,124
Tumut	335*	29,447	29,112
Turon		29,000	29,000
Tweed		54,944	54,944
Ullmarra		15,975	15,975
Uralla		25,206	25,206
Urana		25,000	25,000
Wade		47,500	47,500
Wagga Wagga	3,500	4,510	8,010
Wakool	561	31,700	32,261
Walcha		6,940	6,940
Walgett	3,050	109,389	112,439
Warren		20,732	20,732
Waugoola	21,375	17,036	38,411
Weddin	25,000	18,885	43,885

Appendix No. 7 — continued

COUNTRY MAIN ROADS FUND — continued

PAYMENTS FOR MAINTENANCE AND MINOR IMPROVEMENT OF MAIN ROADS, BRIDGES AND
FERRIES DURING THE YEAR 1970-71 — continued

Work by Councils — continued

City, Municipal or Shire Area	State Highways	Trunk, Tourist and Ordinary Main Roads	Total
	\$	\$	\$
Wellington	238	23,612	23,612
Wentworth	238	38,120	38,358
Windouran	2,100	20,098	22,198
Wingham		3,408	3,408
Wingecarribee		9,000	9,000
Wollondilly		51,468	51,468
Wollongong	2,000	54,090	56,090
Woodburn		17,710	17,710
Wyong		27,089	27,089
Yallaroi	19,872	16,750	36,622
Yarrowlumla		45,303	45,303
Yass		464	464
Young		9,266	9,266
	\$ 509,630	\$ 4,561,836	\$ 5,071,466
Allowances to Councils for Supervision, Long Service Leave etc.			190,844
Total shown in Receipts and Payments — Appendix No. 1 (C) (i)			\$ 5,262,310

Appendix No. 7A

COUNTRY MAIN ROADS FUND

PAYMENTS FOR MAINTENANCE AND MINOR IMPROVEMENT OF MAIN ROADS, BRIDGES AND FERRIES
DURING THE YEAR 1970-71

WORK BY DEPARTMENT

Road No.	Location of Work	Amount	Total
	EXPRESSWAYS	\$	\$
X6	Southern From Main Road No. 513, 50.15m south of Sydney to Gladstone Avenue at 2.7m south of Wollongong, including loading and unloading ramps	81,656	
X8	Wollongong - From State Highway No. 1 at 1.3m south of Wollongong to the intersection with Expressway No. X6, 0.67m from the intersection with State Highway No. 1 at North Wollongong	5,764	
	Total — Expressways		\$ 87,420
	STATE HIGHWAYS		
1	Prince's Highway Main Road No. 185 at Thirroul to the southern boundary of Shoalhaven Shire, excluding the length of 2.47m within the City of Greater Wollongong	492,312	
	Southern boundary of Shoalhaven Shire to the border of Victoria	166,698	\$ 659,010
2	Hume Highway - Nepean River at Camden to Uringalla Creek at the eastern boundary of Mulwaree Shire	322,124	
	Eastern boundary of Mulwaree Shire to the western boundary of Gunning Shire	148,922	
	Western boundary of Gunning Shire to the western boundary of Gundagai Shire at 6.39m north of Tarcutta	337,959	
	Western boundary of Gundagai Shire to the border of Victoria at Albury	170,348	\$ 979,353
3	Federal Highway Junction with State Highway No. 2 to the northern boundary of the Australian Capital Territory		80,058
4	Snowy Mountains Highway - Tathra Wharf to the junction with State Highway No. 19 at Nimmitabel	28,470	
	1m west of Cooma to the northern boundary of Snowy River Shire 9m north of Kiandra	92,422	
	Northern boundary of Snowy River Shire to State Highway No. 2 approximately 12m north of Tarcutta	93,966	\$ 214,858
5	Great Western Highway - Eastern boundary of Blaxland Shire to State Highway Nos 6 and 7 Bathurst		95,040
6	Mid-Western Highway - State Highway No. 5 to the western boundary of the City of Bathurst	2,045	
	Western boundary of the City of Bathurst to the eastern boundary of Waugoola Shire	113,888	
	State Highway No. 17 at Marsden to the western boundary of Bland Shire	74,462	
	Western boundary of Bland Shire to State Highway No. 21 at Hay	55,473	
	Major Bridges on Council controlled lengths	65,014	310,882
7	Mitchell Highway - State Highway No. 5 to the western boundary of the City of Bathurst	97	
	Western boundary of City of Bathurst to the eastern boundary of Warren Shire excluding total length of 7.2m within the City of Orange and the Municipality of Dubbo	219,247	
	Eastern boundary of Warren Shire to the border of Queensland, excluding the length within Nyngan Municipality	209,112	\$ 428,456
8	Barrier Highway - Eastern boundary of Cobar Shire to the eastern boundary of Central Darling Shire excluding 0.8m within the town of Cobar	40,404	
	Eastern boundary of Central Darling Shire to the border of South Australia excluding 6.2m through the City of Broken Hill and 0.2m through the town of Wilcannia	148,384	\$ 188,788

Appendix No. 7A — continued

COUNTRY MAIN ROADS FUND — continued

PAYMENTS FOR MAINTENANCE AND MINOR IMPROVEMENT OF MAIN ROADS, BRIDGES AND FERRIES DURING THE YEAR 1970-71 — continued

Work by Department — continued

Road No	Location of Work	Amount	Total
STATE HIGHWAYS — continued		\$	\$
9	New England Highway - Hunter River at Hexham to Wallis Creek including Wallis Creek bridge	25,396	
	Mount Pleasant-street, Maitland to the southern boundary of Scone Shire, excluding a total length of 1.9m within the towns of Singleton and Muswellbrook	150,195	
	Southern boundary of Scone Shire to the northern boundary of Dumaresq Shire excluding the length of 5.73m within the City of Tamworth and 4.69m within the City of Armidale	221,434	
	44.6m south of Glen Innes at southern boundary of Guyra Shire to 12.3m north of Tenterfield, excluding the length of 4.08m within the Municipality of Tenterfield	165,820	562,845
10	Pacific Highway - Hawkesbury River to the northern boundary of Gosford Shire	76,195	
	Northern boundary of the Gosford Shire to Highfields-parade, Highfields	148,673	
	Southern abutment of Ironbark Creek Bridge to the junction of State Highway No. 10 and Trunk Road No. 90	77,732	
	Junction of State Highway No. 10 and Trunk Road No. 90 to Wang Wauk River	127,982	
	Wang Wauk River to the northern boundary of Nambucca Shire excluding 3.0m through the towns of Kempsey & Taree	333,617	
	Northern boundary of Nambucca Shire to Grant-street, Ballina and Tamar-street, Ballina to the border of Queensland	658,282	\$ 1,422,481
11	Oxley Highway - 1.03m south of Port Macquarie Post Office to the eastern boundary of Cockburn Shire	164,473	
	Eastern boundary of Cockburn Shire to State Highway No. 9 at Bendemmeer	4,917	
	Eastern boundary of Coonabarabran Shire to the eastern boundary of Warren Shire at Collie	147,032	
	Eastern boundary of Warren Shire to State Highway No. 7 at Nevertire	33,087	\$349,509
12	Gwydir Highway - Western boundary of the City of Grafton to Camp Creek including Camp Creek Bridge	50,950	
	Camp Creek at 56.29m east of Glen Innes to 3.24m east of Glen Innes	98,660	
	Major bridges on council controlled length	1,231	\$ 150,841
14	Sturt Highway - State Highway No. 2 near Lower Tarcutta to eastern boundary of Murrumbidgee Shire excluding the length of 5.96m within the City of Wagga Wagga	112,997	
	Eastern boundary of Murrumbidgee Shire to eastern boundary of Balranald Shire	208,508	
	Eastern boundary of Balranald Shire to the Murray River at 1m south of Buronga, including Mildura Bridge but excluding 1.2m through the town of Balranald	79,859	\$ 401,364
15	Barton Highway - Northern boundary of the Australian Capital Territory to State Highway No. 2 near Yass		50,563
16	Bruxner Highway - From 0.95m west of Casino to 49.05m west of Casino	75,380	
	Boggabilla to the border of Queensland at Goondiwindi and from 33.31m east of Bonshaw to 1.0m west of Texas	27,232	\$102,612
17	Newell Highway - Murray River to the western boundary of Urana Shire	102,359	
	Western boundary of Urana Shire to the southern boundary of Jemalong Shire	109,693	
	Southern boundary of Goobang Shire at 8.9m north of Forbes to Gilgandra excluding the length of 2.59m within Dubbo Municipality	147,355	
	Junction with State Highway No. 11 to the northern boundary of Namoi Shire, excluding the length of 3.24m within the Narrabri Municipality	92,089	
	Southern boundary of Boolooroo Shire of Boggabilla excluding length in Moree Municipality	71,057	
	Major bridges on council controlled length	23,413	\$545,966
18	Castlereagh Highway - Gilgandra to the southern boundary of Coonamble Shire	17,779	
	Southern boundary of Coonamble Shire to the Queensland border, excluding approximately 1m through the town of Walgett	131,735	\$ 149,514
19	Monaro Highway - From the northern boundary of Monaro Shire to the southern boundary of Monaro Shire excluding 4.60m within the Municipality of Cooma		\$ 97,783
20	Riverina Highway - Murray River at and including Bethanga Bridge to the western boundary of Corowa Shire west of Albury	51,785	
	Western boundary of Corowa Shire to the eastern boundary of Deniliquin Municipality	26,190	\$ 77,975
21	Cobb Highway - Murray River to the boundary of Carrathool Shire near Mossiel	164,046	
	Southern boundary of Central Darling Shire near Mossiel to State Highway No. 8 near Wilcannia	49,573	\$ 213,619
22	Silver City Highway - State Highway No. 14 at Buronga to Queensland border including spur to Abbotsford Bridge over the Murray River (0.4m) but excluding the length between Wentworth Bridge and 1m north and the full length of 7.5m within the City of Broken Hill		\$186,593
25	State Highway No. 1 near Macquarie Rivulet at 63.43m from Sydney to intersection with State Highway No. 2 at Cross Roads, 94.82m from Sydney		\$107,879
26	State Highway No. 10 at Calga to State Highway No. 10 at Ourimbah		\$174,786
Total — State Highways			\$7,550,775

Appendix No. 7A — continued

COUNTRY MAIN ROADS FUND — continued

PAYMENTS FOR MAINTENANCE AND MINOR IMPROVEMENT OF MAIN ROADS, BRIDGES AND FERRIES DURING THE YEAR 1970-71 — continued

Work by Department — continued

Road No	Location of Work	Amount	Total
TRUNK ROADS		\$	\$
51	Major bridges on council controlled length	1,198	
54	do do	14,108	
55	State Highway No. 5 at Marrangaroo to northern boundary of Blaxland Shire	39,229	
56	Major bridges on council controlled length	54	
57	do do	848	
63	do do	3,943	
66	Boundary of Central Darling Shire at 55m to the boundary of Broken Hill City at 1.9m east of Broken Hill	22,415	
67	Major bridges on council controlled length	4,599	
68	do do	8,160	
70	do do	2,593	
74	do do	12,715	
78	do do	78,600	
79	do do	9,004	
80	do do	7,449	
81	From 3.7m to 15.8m west of Broken Hill	2,064	
83	Major bridges on council controlled length	1,825	
85	do do	5,042	
86	do do	6,059	
92	do do	494	
94	do do	4,082	
95	From State Highway No. 1 North of Wollongong to the junction with Main Road No. 610	106,420	\$ 330,901
Total — Trunk Roads			\$ 330,901

ORDINARY MAIN ROADS

101	Major Bridges on council controlled length	16,844	
102	do do	32,954	
104	Major ferries on council controlled length	18,915	
108	do do	800,585	
111	Major bridges on council controlled length	470	
112	do do	2,875	
128	do do	27,647	
137	do do	41	
142	do do	1,351	
147	Major ferries on council controlled length	43,280	
149	do do	49,593	
151	Major bridges on council controlled length	1,935	
152	do do	1,811	
179	do do	22,282	
181	do do	11,379	
182	Hawkesbury River at Windsor to Main Road No. 503 at Wilberforce including Windsor Bridge	9,717	
198	Major bridges on council controlled length	17,925	
208	do do	680	
209	do do	8,967	
217	do do	7,932	
220	do do	497	
222	do do	16,909	
226	do do	44,695	
232	do do	95	
233	do do	19,202	
243	do do	126	
244	do do	31,813	
248	do do	769	
249	do do	560	
253	State Highway No. 5 at Hartley to Main Road No. 520	23,734	
259	Southern boundary of Camden Municipality at 2.63m to 20.19m west of State Highway No. 2 at Camden	107,528	
261	State Highway No. 1 near Bomaderry to the northern boundary of Shoalhaven Shire	48,844	
270	Major bridges on council controlled length	72	
272	do do	25,772	
278	do do	18	
281	do do	4,332	
286	From 0.94m west of New Jindabyne to 30.80m at Rawson Pass	164,438	
293	State Highway No. 1 to Bomaderry railway station and branch road to railway goods yard	1,218	
307	Main Road No. 261 to Cambewarra Lookout	3,101	
314	Major bridges on council controlled length	516	
319	do do	10,472	
321	do do	300	
324	From State Highway No. 4 south of Rules Point to State Highway No. 4 west of Rules Point	743	
336	Major bridges on council controlled length	17	
358	do do	11,455	
367	do do	2,952	
369	Major ferries on council controlled length	21,754	
386	Major bridges on council controlled length	31,011	
399	do do	19,018	
403	do do	338	
404	do do	3,750	
405	Main Road No. 429 at Wanaaring to the border of South Australia at Hawker Gate	30,563	
405	Major bridges on council controlled length	5,065	
410	do do	12,145	

Appendix No. 7A — continued

COUNTRY MAIN ROADS FUND

PAYMENTS FOR MAINTENANCE AND MINOR IMPROVEMENT OF MAIN ROADS, BRIDGES AND FERRIES
THE YEAR 1970-71 — continued
Work by Department — continued

Road No	Location of Work	Amount	Total
ORDINARY MAIN ROADS — continued		\$	\$
411	Major bridges on council controlled length	301	
423	do do	629	
428	State Highway No. 22 at 34m north of Broken Hill to Kayrunnera	5,825	
429	Northern boundary of Central Darling Shire to the western boundary of Darling Shire at Willara Crossing (Paroo River)	6,337	
435	From Central Darling Shire boundary north of Wilcannia to Willaro via White Cliffs	2,444	
437	Major bridges on council controlled length	44	
503	Main Road No. 182 at Wilberforce to the southern boundary of Patrick Plains Shire	80,718	
	Southern boundary of Patrick Plains Shire to Parsons Creek at 16m south of Singleton including Parsons Creek Bridge	102,574	
513	From 0.4m from S.H. No. 1 (County of Cumberland Boundary) to 5.56m at the junction with Trunk Road No. 95	22,737	
516	Eastern boundary of Blaxland Shire to the eastern boundary of the City of Lithgow	5,430	
522	Major bridges on council controlled length	1,704	
556	Major ferries on council controlled length	80,683	
567	Major bridges on council controlled length	13,195	
572	do do	8,547	
583	do do	34,457	
Total — Ordinary Main Roads			\$2,086,630
TOURIST ROADS			
4016	From Smiggins Hole at 0m to Island Bend/Guthega Road at 3.08m		2,158
SUMMARY			
	Expressways	87,420	
	State Highways	7,550,775	
	Trunk Roads	330,901	
	Ordinary Main Roads	2,086,630	
	Tourist Roads	2,158	10,057,884
	Bridges and Ferries not on classified roads		108,237
	Supervision, testing laboratory working expenses (net), traffic striping, signposting, suspense and operating accounts, etc.		1,861,108
Total as shown in Receipts and Payments Statements — Appendix No. 1 (C) (i)			\$12,027,229

Appendix No. 8

PROCLAMATION OF MAIN ROADS 1970-71

During the year the following new Main Roads and extension of existing Main Roads were proclaimed

City, Municipal or Shire Area	Date of Proclamation	Road No	Description	Mileage
Wollondilly	17.7.70	612	From the Hume Highway (State Highway No. 2) at Picton via Barkers Lodge to the Camden-Oakdale Road (Main Road No. 259) at Oakdale.	7.02
Wakool, Murray and Deniliquin	24.7.70	94	From State Highway No. 21 (Cobb Highway) at Deniliquin via Wakool and Tullakool to Trunk Road No. 67 east of Swan Hill.	90.02
Shellharbour	25.9.70	611	From the junction of Princes Highway (State Highway No. 1) and Lake Entrance Road, Oak Flats, via Lake Entrance Road to Shellharbour Road (Main Road No. 522) at Warilla	3.15
Newcastle and Lake Macquarie	10.11.70	603	From the intersection of Bridges Road, (Main Road No. 326) and Carnley Avenue, New Lambton South, generally westerly and south-westerly via Carnley Avenue and a new road under construction through Blackbutt Reserve, thence westerly to Charlestown Road (State Highway No. 23) and via a section to be constructed to Cardiff Road (Main Road No. 223) at Cardiff Heights.	1.75
By Government Gazette of 17th July, 1970 that part of the Main Road No. 326 along Ellerslie Road was deproclaimed and the route proclaimed along Northcott Drive to the Pacific Highway (State Highway No.10)				0.03
By Government Gazette of 24th July, 1970 that part of Main Road No. 319 approximately one mile south of Beremegad Tank south-easterly to Tullakool was deproclaimed and proclaimed as part of Trunk Road No. 94				2.84
By Government Gazette of 24th July, 1970 the proclamation of the description of Main Road No. 388 was deproclaimed and proclaimed in part as Trunk Road No. 94				54.94
By Government Gazette of 24th July, 1970 the proclamation of the description of Main Road No. 389 was deproclaimed.				10.00

Appendix No. 8 – continued

PROCLAMATION OF MAIN ROADS 1970-71 – continued

By Government Gazette of 23rd October, 1970 the proclamation of the description of Main Road No. 194 was extended to cover the length of Mill Pond Road between General Holmes Drive (Main Road No. 194) and Botany Road (Main Road No. 170)	0.09
By Government Gazette of 8th April, 1971 the proclamation of the description of Main Road No. 146 was extended to cover the length from Eltham generally north-westerly to the Lismore-Byron Bay Road (Trunk Road No. 65) near Boxhill.	2.70

Appendix No. 9

PROCLAMATION OF TOURIST ROADS 1970-71

During the year the following Tourist Roads were proclaimed.

City, Municipal or Shire Area	Date of Proclamation	Road No.	Description	Mileage
Blue Mountains	12.2.71	4052	Macquarie Road, Springwood, from the subway at the western end of Springwood Railway Station generally westerly through the town of Springwood thence via Sir Henry's Parade, Faulconbridge, terminating at the Faulconbridge Cemetery approximately 10 chains north of the junction of Sir Henry's Parade and Martin Place, a length of approximately 2 miles.	2.00
Coonabarabran and Coonamble	14.5.71	4053	From the Oxley Highway (State Highway No. 11) at Coonabarabran generally westerly via Timor Rock to the Coonamble Shire boundary a length of approximately 14.75 miles within the Shire of Coonabarabran thence from the western boundary of Warrumbungle National Park generally westerly to Main Road No. 205 at Gumin, a length of approximately 5.6 miles within the Shire of Coonamble	20.70
Ballina and Tintenbar	21.5.71	4051	The road from Pine Avenue (Main Road No. 545), East Ballina, generally northerly via Skennars Head to Ballina Street, Lennox Head.	5.10
By Government Gazette of 19th February, 1971 the proclamation of the description of Tourist Road No. 4030 was extended to cover the length from the Village of North Haven generally south-westerly to Main Road No. 538 at Laurieton.				1.59

Appendix No. 10

DECLARATION OF SECONDARY ROADS 1970-71

During the year the following Secondary Roads were declared or existing Secondary Roads extended.

City, Municipal or Shire Area	Date of Declaration	Road No.	Description	Mileage
By Government Gazette of 31st July, 1970 the declaration of Secondary Road No. 2014 was rescinded and re-declared from Georges River Road (Main Road No. 549) to Princes Highway (State Highway No. 1) at Rockdale				1.13
By Government Gazette of 31st July, 1970 the declaration of Secondary Road No. 2056 was altered and extended via Frederick Street to Thomas Street and by Government Gazette of 20th November, 1970 from Thomas Street via Milton Street North to the Hume Highway (State Highway No. 2)				1.13

Appendix No. 11

PROCLAMATION OF DEVELOPMENTAL ROADS 1970-71

During the year the following new Developmental Roads were proclaimed or proclamation of existing roads amended.

City, Municipal or Shire Area	Date of Proclamation	Road No.	Description	Mileage
Central Darling	23.4.71	1319	From the Purnawilla - Norma Downs Road near Rosedale Channel generally easterly to the Tilpa-Tonga Road approximately 8 miles from Tilpa.	8

Appendix No. 11A

DEPROCLAMATION OF DEVELOPMENTAL ROADS 1970-71

During the year the following Developmental Roads were deproclaimed or partly deproclaimed.

City, Municipal or Shire Area	Date of Proclamation	Road No.	Description	Mileage
Terania	3.7.70	1085	From the Kyogle-Nimbin Road (Main Road No. 141) down Hanging Rock Creek to a point about three and a half miles southerly from Wongavale Public School.	12.63
Wollondilly	17.7.70	1302	Barker's Lodge Road from Main Road No. 259, at Oakdale generally southerly and easterly to Barker's Lodge (Mowbray Park) approximately 5 miles west of Picton, a length of approximately 7.1 miles	7.02
Wakool	24.7.70	1146	From approximately 18 miles south of Moulamein generally south-westerly to approximately 2½ miles south of Wakool River Bridge	2.98
Wakool	24.7.70	1239	From Main Road No. 319 at Beremegad Tank westerly to Trunk Road No. 67 near Swan Hill, excluding the section 15.1 miles to 17.1 miles from Main Road No. 319 at Beremegad Tank which is part of Developmental Road No. 1146.	32.00

Appendix No. 11A – continued

DEPROCLAMATION OF DEVELOPMENTAL ROADS 1970-71 – continued

City, Municipal or Shire Area	Date of Proclamation	Road No.	Description	Mileage
Gloucester	7.8.70	1150	That part of the Gloucester-Giro Road from 11.10 miles to 17.80 miles north of Gloucester	6.70
Jemalong	7.8.70	1199	From the Newell Highway (State Highway No. 17) westerly for approximately 10 miles to the junction with Lowes Road	10.00
Tumbarumba	25.9.70	1226	From Trunk Road No. 85 about 8 miles northerly from Tumbarumba north-westerly and northerly a distance of approximately 2.65 miles to the northern boundary of Block 6 of Willigobung War Service Land Settlement	3.15
Lachlan	19.3.71	1029	From Main Road No. 230 northerly to Shire Road No. 59 at Kiacatoo Railway Siding.	4.05
Berrigan	19.3.71	1172	From the Newell Highway (State Highway No. 17) at Tocumwal generally westerly to the Tuppal turn-off, a distance of approximately 3.16 miles	3.16
Copmanhurst	19.3.71	1179	Those sections of Coaldale Road measured from Main Road No. 150 near Clifden between 0.0 to 2.28 miles, 16.6 to 18.7 miles and 21.0 to 33.5 miles	19.07
Nambucca	14.5.71	1078	That part of North Arm Road from 2.5 miles to 8.1 miles west of Bowraville	5.60
Coonabarabran	14.5.71	1269	The road from Timor Rock generally westerly to the eastern boundary of Coonamble Shire.	8.30
Eurobodalla	11.6.71	1206	That part of the road from Batehaven to Rosedale from a point approximately 7.44 miles from the Princes Highway (State Highway No. 1) generally woutherly via Malua Bay and Pretty Point to the junction of the South Rosedale Road	2.00

Appendix No. 12

PROCLAMATION OF DEVELOPMENTAL WORKS 1970-71

During the year the following Developmental Works were proclaimed.

City, Municipal or Shire Area	Date of Proclamation	Road No.	Description	Mileage
Guyra	24.12.70	3217	The construction of high-level concrete bridges on Washpool and Falconer Creeks, 0.52 miles and 2.20 miles, respectively, on Ward's Mistake Road North of Main Road No. 135	

Appendix No. 12A

PROCLAMATION OF DEVELOPMENTAL WORKS 1970-71

During the year the following Developmental Works were deproclaimed.

Cit. Municipal or Shire Area	Date of Proclamation	Road No.	Description	
Mitchell	19.2.71	3057	The construction of the road over Scelley's Swamp, between 1 mile and 2.3 miles south of Arajoel, being part of the road from Arajoel to Walla Walla via Milbrulong and Pleasant Hills	
Mitchell	31.3.71	3067	The road from 29.5 to 30.15 miles and 31.95 miles to 34.35 miles west of Wagga Wagga via the northern side of the Murrumbidgee River towards Narrandera.	

Appendix No. 13

MILEAGES OF EXPRESSWAYS, STATE HIGHWAYS, TRUNK ROADS, ORDINARY MAIN ROADS, SECONDARY ROADS, TOURIST ROADS AND DEVELOPMENTAL ROADS IN NEW SOUTH WALES FOR THE FIVE YEARS ENDED 30TH JUNE, 1971

	AT 30TH JUNE				
County of Cumberland Area -	1967	1968	1969	1970	1971
Expressways		7	10	12	13
State Highways	195	192	193	194	194
Ordinary Main Roads	668	665	662	673	685
Total all Main Roads and Expressways	863	864	865	879	892
Secondary Roads	157	159	164	176	170
Tourist Roads	51	55	51	51	53
Developmental Roads	14	14	14	14	14
Total all Classified Roads	1,085	1,092	1,094	1,120	1,129
Country Area -					
Expressways		14	14	14	14
State Highways	6,353	6,349	6,342	6,345	6,342
Trunk Roads	4,232	4,228	4,210	4,245	4,332
Ordinary Main Roads	10,961	10,929	10,888	10,899	10,828
Total all Main Roads and Expressways	21,546	21,520	21,454	21,503	21,516
Tourist Roads	145	163	168	168	190
Developmental Roads	2,722	2,733	2,705	2,728	2,656
Total all Classified Roads	24,413	24,416	24,327	24,399	24,362
Total for whole State -					
Expressways		21	24	26	27 *
State Highways	6,548	6,542	6,535	6,539	6,536
Trunk Roads	4,232	4,228	4,210	4,245	4,332
Ordinary Main Roads	11,629	11,593	11,550	11,572	11,408
Total all Main Roads and Expressways	22,409	22,384	22,319	22,382	22,408
Secondary Roads	157	159	164	176	170
Tourist Roads	196	218	219	219	243
Developmental Roads	2,736	2,747	2,719	2,741	2,670
Total all Classified Roads	25,498	25,508	25,421	25,518	25,491 **

* Excludes three miles of expressway which are proclaimed Main Roads

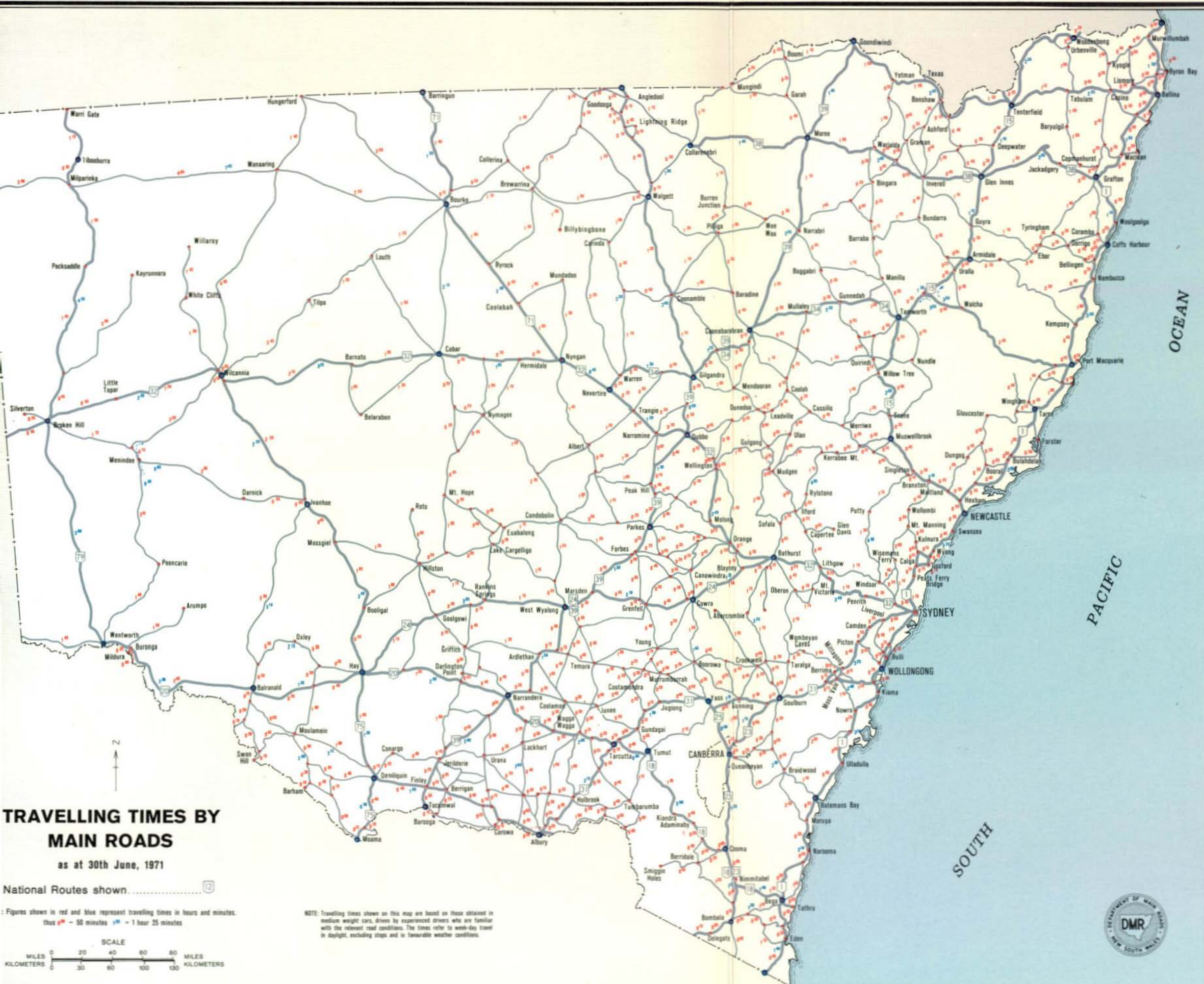
**In addition, the Department is responsible for the full cost of works on unclassified roads in the unincorporated area in the western part of the State, totalling 1,542 miles and is also responsible for a length of 27 miles in the incorporated area.

Appendix No. 14

DISTRIBUTION BETWEEN THE DEPARTMENT AND COUNCILS OF RESPONSIBILITY FOR CARE AND CONTROL OF ROADS AT 30TH JUNE, 1971 IN ACCORDANCE WITH THE PROVISIONS OF THE MAIN ROADS ACT, 1924

	County of Cumberland *	Country	Total
1. Roads which are the responsibility of the Department of Main Roads.			
(a) Where work was carried out by the Department -			
Expressways	13	14	27
State Highways	190	5,519	5,709
Trunk and Ordinary Main Roads in the eastern and Central Divisions other than the County of Cumberland		260	260
Ordinary Main Roads in the County of Cumberland	382		382
Unincorporated area of the Western Division -			
Trunk and Ordinary Main Roads		471	471
Unclassified Roads		1,542	1,542
(b) Where work was carried out for the Department by Councils -			
State Highways	4	823	827
Ordinary Main Roads in the County of Cumberland	303		303
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		14,429	14,429
	892	23,058	23,950

* County of Cumberland refers to the area defined in Part IV, Section 9 of the Main Roads Act, 1924



TRAVELLING TIMES BY MAIN ROADS

as at 30th June, 1971

National Routes shown.....12

Figures shown in red and blue represent travelling times in hours and minutes.
thus 50 - 50 minutes 1 25 - 1 hour 25 minutes

SCALE
MILES 0 20 40 60 80
KILOMETERS 0 30 60 90 120

NOTE: Travelling times shown on this map are based on those obtained in medium weight cars, driven by experienced drivers who are familiar with the relevant road conditions. The times refer to week-day travel in daylight, excluding stops and in favourable weather conditions.

